

Depreciation Accounts

1. Introduction	7. Depreciable Assets
2. Meaning and Definition of Depreciation	8. Different Methods of Depreciation
3. Characteristics of Depreciation	9. Difference : Straight Line Method and Reducing Balance Method
4. Necessity (objectives) of Provision for Depreciation	10. Methods of Recording Depreciation
5. Factors Affecting Depreciation	11. Typical Illustrations
6. Factors to be Considered to Determine Amount and Rate of Depreciation	— Exercise

1. Introduction

Different kind of fixed tangible assets like machines, furniture, building, vehicles, computer, etc. are used in trade-business. Each asset has its own useful life. The useful life is based on, the time period for which it can be used. Due to the use of asset, its efficiency decreases. Due to the natural or physical factors, due to passing of time or due to innovation, the value of asset keeps on decreasing. Sometimes, inspite of having good physical condition of assets, the use of old assets becomes expensive due to the emergence of new and more efficient assets. Due to these reasons, the life of asset becomes finite (limited). Because of the any of the above stated reasons, when the efficiency of asset constantly decreases and consequently the useful value of also constantly and permanently decreases, it is known as depreciation.

2. Meaning and Definition of Depreciation

(1) **Carter** : “Depreciation is the gradual permanent decrease in the value of an asset due to any reason.”

(2) **Spicer and Pegler** : “Depreciation may be defined as a measure of the exhaustion of the effective life of an asset, due to any cause, during a given period.”

From the above definitions, it can be understood that, the permanent reduction in value of asset is depreciation. At the end of certain years, asset becomes useless for determined specific use and object. Depreciation is time related expense. It is debited to Profit and Loss account as non cash revenue expense. It indicates reduction in useful value of an asset; thus it is debited to Profit and Loss account.

3. Characteristics of Depreciation

(1) **Fixed Assets** : Depreciation is to be calculated on fixed tangible assets, thus these assets are known as depreciable assets. Beside this, intangible assets like patent, copy right, trademark are also gradually written off during their estimated life. Depreciation is not calculated on current and liquid asset of the business e.g. cash, stock, debtor etc.

(2) **Useful Value** : Depreciation indicates continuous and permanent reduction in the useful value of assets.

(3) **Time** : Depreciation is time related expense.

(4) **Revenue Expense** : As a non cash revenue expense, depreciation is debited to Profit and Loss account.

(5) **Written off Amount** : In spite of being a revenue expenditure, depreciation is not paid in cash like salary and rent.

(6) **Use of Assets** : Depreciation is based on consumption along with time.

(7) **At the End of Accounting Year** : Generally, amount of depreciation is deducted from the value of assets at the end of an accounting year.

(8) **Provision** : Depreciation is one kind of provision.

4. **Necessity (Objectives) of Provision for Depreciation**

Depreciation is a different kind of expense than other routine expenses of trade and business. It is not cash expense like rent, salary, wages etc which are paid in respective accounting year. It is provided in respective accounting year and incorporated in the accounts. The following arguments specify the necessity or objectives of depreciation.

(1) **To be treated as business expense** : Depreciation is a revenue expense of the respective accounting year and which is not paid in cash.

(2) **To know true and fair profit** : It is essential to consider depreciation to know the true and fair profit-loss of the business. Thus it is debited to profit and loss account.

(3) **To know true and fair financial position of business** : Balance sheet discloses economic position of the business, where depreciable assets are shown after deducting depreciation. Due to the disclosure of assets after depreciation, balance sheet reflects true position. On the basis of that, true and fair position of entire business can be ascertained.

(4) **To determine correct cost of production** : To determine the cost of goods produced in factory or services, expense affecting production or production related expenses should be considered. Thus, like other expenses depreciation on depreciable assets used in business is essential to be considered to determine the cost.

(5) **To determine correct selling price of product or service** : To arrive at a selling price of a product or service, total cost is determined, where depreciation is included.

(6) **To maintain capital** : The significant share of total capital is employed in fixed assets. These assets become useless at the end of their useful life. To acquire new assets, replacing these assets, capital is needed. To maintain this kind of capital in business, depreciation provision is being made on assets of business.

(7) **To comply with legal provision** : A computation depreciation and its recording in accounts are done according to legal provision.

5. **Factors Affecting Depreciation**

Depreciation is a reduction in the useful value of asset. Causes of reduction in useful value of asset are as follows :

(1) **Use of asset** : The efficiency of any asset reduces due to its use. The useful life and useful value also reduces due to the reduction in efficiency of asset. During the year, value reduction of asset, shows amount of depreciation.

(2) **Time factor** : The life of some assets come to end automatically on completion of certain period of time. The life of some assets of business is predetermined like lease hold property.

e.g. Lease hold machines for five years. The useful life of such assets gradually reduces with time and at the end of a fixed period its value is considered zero. After deduction of the estimated scrap value, the remaining cost price is written off as depreciation during the useful life of asset. In this case, it can be said that cost price after deduction of scrap value indicates total depreciation of respective asset. Many times assets remain unused, still their value is decreasing. This decrease is also known as depreciation.

(3) Gradual reduction in quantity : The value of some assets is determined by the quantity of the respective assets, like mines, gas and oil wells. The value of such assets is based on their size of quantity. The use (acquisition) of such assets, reduce their value. This reduction known as depreciation. In such kind of assets, the depreciation is computed in the proportion of the reduction in quantity. The amount paid, is written off proportionally as a depreciation.

(4) Permanent reduction in market value : As and when there is permanent reduction in market value of asset, the amount of reduction is known as depreciation.

(5) Accident : Some times accidents create loss during the use of assets. So this reduces the utility and estimated life of the asset and consequently the value of asset reduces. This reduction is known as depreciation.

(6) New innovation and research : At times the introduction of new technology or innovation reduces the value of the assets in use. Such reduction is known as depreciation in value.

(7) Natural factor : Due to the natural factors like flood, earthquake, rain, climate etc the estimated life of asset decreases or asset becomes useless and consequently the value of asset reduces. This is known as depreciation.

6. Factors to be Considered to Determine Amount and Rate of Depreciation

The depreciation of asset is an estimation based on various factors. Higher the degree of real and accurate estimate, higher the degree of realistic depreciation determination. Thus to determine the amount of depreciation, the computation of depreciation and the rate of depreciation the following important points are required to be considered.

(1) Cost price of assets : The computation of depreciation is always done on cost price. Thus the determination of cost price is very significant. During the determination of cost price of asset the transportation cost and installation cost are added to the purchase price of asset. If old asset is purchased, expenses incurred to bring the asset in usable form, are added to the purchase price of an asset. This can be represented in the form of formula as follows.

Cost price = Purchase price + Transportation cost + Installation cost

If old asset (second hand asset) is purchased :

Cost price = Purchase price + Expenses incurred to bring the asset in usable forms. (repairing expenses)

e.g. A company of Ahmedabad has purchased a machine from Surat for ₹ 50,000. The transportation cost to bring this machine from Surat was ₹ 4000. ₹ 2000 paid to install this machine in factory.

The cost price of machine will be, ₹ 50,000 + ₹ 4000 + ₹ 2000 = ₹ 56,000.

(2) Estimated life of asset : The time period for which an asset can be used efficiently, is known as estimated life of asset. During the determination of estimated life of an asset, technical aspects and possibility of innovation etc. are considered.

(3) **Estimated scrap value of asset** : The amount which is realizable at the end of the estimated life of an asset is known as scrap value of asset. The depreciable amount of an asset is determined after the deduction of the scrap value from the cost price of a asset. The annual amount of depreciation is determined by dividing this depreciable amount with the estimated life of a asset.

(4) **Use of asset** : The efficiency of any asset depends on its use. Higher the use of asset, higher the amount of depreciation is chargeable. It means that the life of a asset is dependent on the use rather than its life. In a factory, when machines are used in more than one shifts, proportionately high amount of depreciation is chargeable. Thus the use of an asset is considered as a very important factor, to determine the amount of depreciation.

(5) **Repairing and maintenance expense** : The estimated life and efficiency of asset increases, if sufficient amount at appropriate time is spent on repairing and maintenance of asset. Thus, annual depreciation would decrease. Hence, this aspect is also necessary to determine the rate of depreciation. Simultaneously, it is also observed that, a balance should be maintained between amount of depreciation and repairing.

(6) **Interest on capital employed for asset** : When fixed assets are acquired by loan, and production is not commenced after the acquisition of asset, interest of this period is added to the price of asset. The depreciation is calculated on such total amount.

(7) **New innovation and research** : Continuous new innovations and researches are taking place in present times. Consequently, after some time asset become obsolete. Therefore, the remaining time period of asset is also considered to determine the depreciation.

(8) **Other factors** : Besides, above mentioned factors, the objective of the use of asset, possibility of market price reduction, possibility of accident, natural calamities and other factors are also essential to be considered for depreciation.

7. Depreciable Assets

There is reduction in value of some assets due to their limited life, they are called as depreciable assets. While on some assets depreciation is not charged, because their value does not reduce due to use for a passage of time. e.g. Land.

In normal circumstances, the following explanation can be given for depreciable assets.

(1) An asset which is purchased for the purpose of use; it means, not acquired for the purpose of sale, such asset is considered as depreciable asset.

(2) An asset which is used for more than one accounting period, such asset is considered as depreciable asset. It means asset which is useful for one accounting year only, it is not considered as a long term depreciable asset, because the total cost of asset is written off as depreciation.

(3) An asset which has limited life, is considered to be a depreciable asset. But asset which has unlimited life or whose estimation of life is not possible, this kind of asset is not considered as depreciable asset. e.g. Land.

With observation of above mentioned characteristics the list of depreciable assets is as follows :

(i) Building (ii) Plants and machines (iii) Furniture and fixtures (iv) Loose tools (v) Lease hold properties (vi) Vehicles (vii) Patent, copyright, trade mark (viii) Mines, Gas wells, Oil wells etc.

8. Different Methods of Depreciation

- (1) Fixed Instalment or Straight Line Method
- (2) Reducing Balance Method or Written down Value Method
- (3) Annuity Method
- (4) Depreciation Fund or Sinking Fund Method
- (5) Insurance Policy Method
- (6) Revaluation Method
- (7) Compound Interest Method
- (8) Depletion Method
- (9) Mileage Method
- (10) Machine Hour Rate Method

Note : As per syllabus, practical problems only on fixed instalment method and reducing balance method are expected.

(1) Fixed Instalment or Straight Line Method

This is very simple and widely used (popular) method. Under this method the annual amount of depreciation remains identical. The graph of depreciation of each year remains in horizontal line. Thus, this method is known as fixed instalment method or straight line method.

(A) Procedure to determine the amount of depreciation :

(i) Under this method to determine the amount of depreciation, total depreciable amount is determined by deducting estimated scrap value from the cost price of an asset. By dividing this depreciable amount with the total years of estimated life of an asset, the arrived amount is called as the annual amount of depreciation.

The annual amount of depreciation can be obtained with the help of the following formula :

$$\text{Formula : } D = \frac{C - S}{N}$$

Where, D = Annual depreciation

C = Cost Price

S = Scrap Value

N = Number of Years of Useful Life

(ii) Some times to determine the amount of depreciation, depreciation rate is provided under this method. In this circumstances, the multiplication of cost price with the rate of depreciation, gives annual amount of depreciation. For this, the following formula can be used.

$$\text{Formula : } D = \frac{C \times R}{100}$$

Where, D = Annual depreciation

C = Cost Price

R = Rate of Depreciation

From the formula given below, the rate of depreciation can be obtained as follows :

$$R = \frac{D}{C} \times 100$$

(B) Benefits :

- (i) It is very simple method to compute depreciation on asset.
- (ii) This method is very easy to understand.
- (iii) Since, the amount of depreciation remains identical every year, no frequent computation of depreciation is required.

(C) Disadvantages (limitations) :

- (i) Under this method, the amount of depreciation remains identical every year. Thus no appropriate balance is maintained between depreciation and maintenance expense. In the initial years of a new asset, the repairing expense comes minimum and in subsequent years it increases.
- (ii) Under this method, interest on capital is ignored.

(D) For which assets, it is appropriate ?

This method is appropriate for those assets, whose, useful estimated life can be determined very easily. e.g. Leasehold properties, copyright, patent, trade mark etc.

(E) Accounting treatment of depreciation :

- (i) For the first year.

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1	When asset is purchased : Asset A/c Dr To bank A/c To bank/cash A/c (Being asset is purchased and expenses are paid)		Cost price	Purchase price Expenses paid
2	Recording of depreciation at the end of the accounting year : Depreciation A/c Dr To asset A/c (Being the amount of depreciation is charged.)	
3	Entry for closing down depreciation account and transfer to profit and loss account : Profit and loss A/c Dr To depreciation A/c (Being depreciation account is closed and transferred to profit and loss account.)	

- (ii) Second year onwards, at the end of each accounting year, until the asset is sold / the completion of life.

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1	Recording of depreciation : Depreciation A/c Dr To asset A/c (Being the amount of depreciation is charged.)	
2	Entry for closing down depreciation account and transfer to profit and loss account : Profit and Loss A/c Dr To depreciation A/c (Being depreciation account is closed and transferred to profit and loss account.)	

The annual amount of depreciation is disclosed in annual accounts on debit side of profit and loss account and in balance sheet on asset side it is deducted from the cost price of an asset at the end of each accounting year.

Illustration 1 : Sheela Ltd. has purchased a machine for ₹ 48,000 on 1-04-2012. Installation expense of this machine was ₹ 2000. An estimated life of this machine is 10 years and scrap value of machine is expected to be ₹ 10,000. Determine annual depreciation and annual depreciation rate under straight line method of depreciation. Accounting year of the company is ending on 31st March. Prepare, journal entries, machine account and depreciation accounts for first three years. Disclose accounting effect of it in final accounts of first year.

Ans. :

(1) **Annual depreciation :** $D = \frac{C-S}{N}$

D = Amount of annual depreciation = ?

C = Cost price = Purchase price + Installation expense
= 48,000 + 2000 = ₹ 50,000

S = Scrap value = ₹ 10,000

N = Total life in years = 10 years

$$D = \frac{50,000 - 10,000}{10} = \frac{40,000}{10} = ₹ 4000$$

Annual amount of depreciation ₹ 4000

(2) **Rate of depreciation :**

$$R = \frac{D}{C} \times 100$$

$$= \frac{4000}{50,000} \times 100$$

R = 8 %

Annual rate of depreciation 8 %

Journal Entries in the Books of Sheela Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1-4-12	Machine A/c Dr To bank A/c To cash A/c (Being machine of ₹ 48,000 purchased and payment is made by cheque and installation expense ₹ 2000 paid in cash.)		50,000	48,000 2000
31-3-13	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 4000 is recorded.)		4000	4000
31-3-13	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 4000 transferred to profit and loss account.)		4000	4000
31-3-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 4000 is recorded.)		4000	4000
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 4000 transferred to and loss account.)		4000	4000
31-3-15	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 4000 is recorded.)		4000	4000
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation ₹ 4000 transfered to profit and loss account.)		4000	4000
	Total		74,000	74,000

Ledger of Sheela Limited

Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To Bank A/c		48,000	31-3-13	By Depreciation A/c		4000
"	To Cash A/c		2000	31-3-13	By balance c/d		46,000
			50,000				50,000
1-4-13	To balance b/d		46,000	31-3-14	By Depreciation A/c		4000
				31-3-14	By balance c/d		42,000
			46,000				46,000
1-4-14	To balance b/d		42,000	31-3-15	By Depreciation A/c		4000
				31-3-15	By balance c/d		38,000
			42,000				42,000

Depreciation Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
31-3-13	To machine A/c		4000	31-3-13	By profit and loss A/c		4000
			4000				4000
31-3-14	To machine A/c		4000	31-3-14	By profit and loss A/c		4000
			4000				4000
31-3-15	To machine A/c		4000	31-3-15	By profit and loss A/c		4000
			4000				4000

Accounting Effect in Annual Accounts

**Profit and Loss Account
for the Year Ending 31-3-13**

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	4000		

Balance Sheet as at 31-3-13

Capital-Liabilities	Amt. (₹)	Assets-Debts	Amt. (₹)
		Machine	50,000
		— Depreciation	4000
			46,000

Note : In the above mentioned illustration the cost of machine is ₹ 50,000. If depreciation is to be calculated at 8 % per annum instead of the estimated scrap value and useful life, the depreciation will be calculated as under. Accounting treatments, (accounting effects) in annual accounts would remain the same.

Annual amount of depreciation :

$$D = \frac{C \times R}{100} = \frac{50,000 \times 8}{100}$$

$$D = ₹ 4000$$

(2) Reducing Balance Method :

(A) Method to determine depreciation amount : Under this method every depreciation is calculated on opening balance of asset at the predetermined rate. Opening balance means closing balance of the previous year after the deduction of depreciation. Thus due to the subtraction of depreciation from the value of asset, the opening balance of asset would reduce to that extent. Consequently, every year amount of depreciation gradually reduces. Thus, this method is known as reducing balance method.

Illustration 2 : Surbhi & Co. purchased a machine at a cost of ₹ 57,000. Installation cost to it was ₹ 3000. Compute depreciation at 5 % under reducing balance method for first three years.

$$\text{Cost price} = 57,000 + 3000 = ₹ 60,000$$

Computation of Depreciation

Particulars	Amount (₹)
Cost price of machine	60,000
– Depreciation at the end of first year (5 % on 60,000)	3000
Closing balance at the end of first year (Opening balance of second year)	57,000
– Depreciation at the end of second year (5 % on 57,000)	2850
Closing balance at the end of second year (Opening balance of third year)	54,150
– Depreciation at the end of third year (5 % on 54,150)	2708
Closing balance at the end of third year (Opening balance of fourth year)	51,442

Explanation :

- (i) Every year depreciation is calculated at 5 %.
- (ii) Every year depreciation is calculated on the opening balance of respective year. Due to the depreciation, opening balance of each year reduces. In this case this amount is ₹ 57,000, ₹ 54,150 and ₹ 51,442.
- (iii) The amount of depreciation also gradually reduces. It is ₹ 3000, ₹ 2850 and ₹ 2708 respectively. Therefore, this method is known as reducing balance method.

(B) Advantages :

- (i) Under this method balance between depreciation amount and repairing expense is maintained. Because in the initial years, the amount of depreciation would remain high and it

reduces in subsequent years. While in initial years repairing amount remains insignificant and with passing of time the repairing expenses increase. In this manner, the balance between the amount of depreciation and the repairing expense is maintained.

(ii) This is simple method to compute depreciation.

(C) Disadvantages :

(i) This method is not as simple as the straight line method.

(ii) Under this method, interest on capital employed for asset is not considered.

(D) For which assets it is appropriate : This method is appropriate for those assets which are of long term use and which have balance amount after their use. e.g. furniture, fixtures, plant and machines, building etc.

(E) Accounting treatments of depreciation : Under this method accounting treatments are given like straight line method. Every year only the amount of depreciation reduces gradually.

Illustration 3 : Harpal Limited has purchased a machine for ₹ 1,50,000 on 1-4-12. Installation expense to it was ₹ 10,000. If every year 15 % depreciation is chargeable, under reducing balance method, pass journal entries and prepare machine account, depreciation account for first three years. Disclose accounting effect of it in final accounts of first two years.

Ans. :

Journal Entries in the Books of Harpal

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1-4-12	Machine A/c Dr To bank A/c To cash A/c (Being machine purchased for ₹ 1,50,000 and paid installation ₹ 10,000 in cash.)		1,60,000	1,50,000 10,000
31-3-13	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 24,000 is recorded.)		24,000	24,000
31-3-13	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 20,400 is transferred to Profit and Loss account.)		24,000	24,000
31-3-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 20,400 is recorded.)		20,400	20,400
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 20,400 is transferred to Profit and Loss account.)		20,400	20,400

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-15	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 17,340 is recorded.)		17,340	17,340
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 17,340 is transferred to Profit and Loss account.)		17,340	17,340
	Total		2,83,480	2,83,480

Ledger of Harpal Limited

Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		1,50,000	31-3-13	By depreciation A/c		24,000
"	To cash A/c		10,000	31-3-13	By balance c/d		1,36,000
			1,60,000				1,60,000
1-4-13	To balance b/d		1,36,000	31-3-14	By depreciation A/c		20,400
			1,36,000	31-3-14	By balance c/d		1,15,600
1-4-14	To balance b/d		1,15,600	31-3-15	By depreciation A/c		17,340
			1,15,600	31-3-15	By balance c/d		98,260
							1,15,600

Depreciation Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
31-3-13	To machine A/c		24,000	31-3-13	By Profit and Loss A/c		24,000
			24,000				24,000
31-3-14	To machine A/c		20,400	31-3-14	By Profit and Loss A/c		20,400
			20,400				20,400
31-3-15	To machine A/c		17,340	31-3-15	By Profit and Loss A/c		17,340
			17,340				17,340

Accounting Effect in Annual Accounts
Profit and Loss Accounts
for the year ending 31-3-13

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	24,000		

Balance Sheet as at 31-3-13

Capital-Liabilities	Amt. (₹)	Assets-Debts	Amt. (₹)
		Machine 1,60,000	
		– Depreciation 24,000	1,36,000

Profit and Loss Account for the year ending 31-3-14

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	20,400		

Balance Sheet as at 31-3-14

Capital-Liabilities	Amt. (₹)	Assets-Debts	Amt. (₹)
		Machine 1,36,000	
		– Depreciation 20,400	1,15,600

9. Difference : Straight Line Method and Reducing Balance Method

No.	Aspect of Difference	Straight Line Method	Reducing Balance Method
(1)	Computation of depreciation amount	Under this method depreciation is calculated by deducting scrap value from cost price and dividing arrival amount by number of years of estimated life of asset.	Under this method depreciating amount is calculated on the basis of predetermined rate of depreciation.
(2)	Amount of depreciation	Under this method every year amount of depreciation remains identical.	Under this method every year amount of depreciation reduces.
(3)	Value of asset at the end of estimate life.	Under this method value of asset becomes zero at the end of its estimated life.	Under this method value of asset does not become zero at the end of its estimated life.

No.	Aspect of Difference	Straight Line Method	Reducing Balance Method
(4)	Amount of depreciation and repair expense.	Under this method no balance is maintained between depreciation and maintenance expense. Because during every year depreciation remains identical and during initial years maintenance remains low. While during later years the amount of maintenance increases but amount of depreciation remains identical.	Under this method appropriate balance is maintained between amount of depreciation and maintenance. Because, during initial years depreciation remains high and maintenance remains low. While during later years depreciation amount reduces and maintenance expense increases.
(5)	On which price depreciation is calculated ?	On cost price of asset depreciation is calculated.	On depreciated price depreciation is calculated. It means depreciation is calculated on opening balance of respective years.

On different valid grounds the method of depreciation is changed by business enterprises. Specifically, conversion is done of straight line method into reducing balance method or of reducing balance method into straight line method.

But, one aspect is to be kept in mind that, irrespective of the use of depreciation method, the amount of total depreciation at the end of estimated life remains identical. Under straight line method every year amount of depreciation is identical. Under reducing balance method every year amount of depreciation reduces. To maintain the identical amount of total depreciation and to prevent the violation of this rate, the rate of depreciation of reducing balance method is always higher than the depreciation rate under straight line method. To determine the rate of depreciation the following formula is used under reducing balance method.

$$\text{Rate of depreciation} = 1 - \sqrt[n]{\frac{\text{Scrap value of asset}}{\text{Cost price of asset}}} \times 100$$

n = life in years

Let us understand this aspect with following illustration :

e.g. An enterprise has purchased a machine for ₹ 1,25,000. The estimated scrap value of this machine is ₹ 25,000. The estimated life of machine is 4 years.

From the above information calculate rate of depreciation and total amount of depreciation under :

(i) Straight line method (ii) Reducing balance method.

(i) **Straight line method :**

$$\text{Annual depreciation in amount} = \frac{\text{Cost price of machine} - \text{Scrap value}}{\text{Estimated life}} = \frac{1,25,000 - 25,000}{4} = ₹ 25,000$$

$$\text{Rate of annual depreciation} = \frac{\text{Annual depreciation}}{\text{Cost price of machine}} \times 100 = \frac{25,000}{1,25,000} \times 100 = 20 \%$$

(ii) **Reducing balance method :**

$$\text{Annual rate of depreciation} = 1 - \sqrt[n]{\frac{\text{Scrap value of asset}}{\text{Cost price of asset}}} \times 100$$

$$= 1 - \sqrt[4]{\frac{25,000}{1,25,000}} \times 100 = \text{Approximately } 33.13 \%$$

Straight Line Method		Reducing Balance Method	
Cost price of machine	1,25,000	Cost price of machine	1,25,000
– 20 % depreciation	25,000	– 33.13 % depreciation	41,413
	1,00,000		83,587
– 20 % depreciation	25,000	– 33.13 % depreciation (on reduced balance)	27,692
	75,000		55,895
– 20 % depreciation	25,000	– 33.13 % depreciation (on reduced balance)	18,518
	50,000		37,377
– 20 % depreciation	25,000	– 33.13 % depreciation (on reduced balance)	12,377
Scrap value	25,000	Scrap value	25,000
∴ Total depreciation 25,000 + 25,000 + 25,000 + 25,000 =	1,00,000	∴ Total depreciation 41,413 + 27,692 + 18,518 + 12,377 =	1,00,000

Note : (1) Under reducing balance method when depreciation rate is to be calculated by applying the above mentioned formula, the use of Log method is essential. It is not expected from students.

(2) Only, theoretical explanation is given.

10. Methods of Recording Depreciation

From the view point of accounting, there are two methods for recording depreciation, which are as follows :

(1) Method of providing depreciation on the respective assets

(2) Method of provision for depreciation

(1) Method of Providing Depreciation on the Respective Asset :

Under this method, by applying predetermined method of depreciation, the amount of depreciation is debited to depreciation account and credited to the respective asset, consequently, the book value of asset reduces to the extent of amount of depreciation.

Illustration 4 : Akshara Limited has purchased a machine for ₹ 70,000 on 01-4-2013. 10 % depreciation is to be charged as per straight line method on this machine. Pass journal entries for first two years of depreciation in the books of company and disclose effect in annual accounts.

Ans. : Here, amount of depreciation will be ₹ 7000. Since straight line method of depreciation is applied, the amount of depreciation would remain identical and its accounting treatments will be as follows :

Journal Entries in the Books of Akshara Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 7000 is recorded.)		7000	7000
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 7000 is transferred to Profit and Loss account.)		7000	7000

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-15	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 7000 is recorded.)		7000	7000
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 7000 is transferred to Profit and Loss account.)		7000	7000
	Total		28,000	28,000

Note : At the end of every accounting year the amount of depreciated will be transferred to Profit and Loss account.

Accounting Effect in Annual Accounts

Profit and Loss Account

for the year ending 31-3-14

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine dereciation A/c	7000		

Profit and Loss Account

for the year ending 31-3-15

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	7000		

Balance Sheet as at 31-3-14

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine 70,000	
		– Depreciation 7000	63,000

Balance Sheet as at 31-3-15

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine 63,000	
		– Depreciation 7000	56,000

As disclosed above, at the end of every accounting year depreciation treatments will be given in annual accounts. The book value of asset, after deduction of depreciation of respective year will be shown in the balance sheet.

(2) Method of Provision for Depreciation

Under this method, first of all, the amount of depreciation is decided on the basis of predetermined method of depreciation. Subsequently depreciation amount is debited to depreciation account and credited to depreciation provision account. In this manner, amount written off every year, will be accumulated in depreciation account; consequently the amount of depreciation would increase every year. This accumulated amount shows, total amount of depreciation of the respective period. From the cost price of asset, the total depreciation provision amount is deducted and disclosed on the asset side of balance sheet at the end of every accounting year. While the amount debited to depreciation is transferred to profit and loss account.

Depreciation provision account is disclosed in the books of account. Since the amount of depreciation of year gets accumulated in depreciation provision account, it is known as accumulated depreciation account also.

Illustration 5 : On 1-4-2013 book value of an asset is ₹ 70,000. Provide 10 % depreciation under straight line method through creation of depreciation provision account. Pass journal entries show its effects in annual accounts and prepare depreciation provision account for first two years.

Journal Entries

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-14	Depreciation A/c Dr To depreciation provision A/c (Being depreciation of ₹ 7000 is provided.)		7000	7000
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 7000 transferred to profit and loss account.)		7000	7000
31-3-15	Depreciation A/c Dr To depreciation provision A/c (Being depreciation of ₹ 7000 is provided.)		7000	7000
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 7000 transferred to profit and loss account.)		7000	7000
	Total		28,000	28,000

Depreciation Provision Account
(Accumulated Depreciation Account)

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
31-3-14	To balance c/d		7000	31-3-14	By depreciation A/c		7000
			7000				7000
31-3-15	To balance c/d		14,000	1-4-14	By balance b/d		7000
			14,000	31-3-15	By depreciation A/c		7000
							14,000

Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-13	To bank A/c		70,000	31-3-14	By balance c/d		70,000
			70,000				70,000
1-4-14	To balance b/d		70,000	31-3-15	By balance c/d		70,000
			70,000				70,000

Accounting Effect in Annual Accounts

Profit and Loss Account for the year ending 31-3-14

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	7000		

Profit and Loss Account for the year ending 31-3-15

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	7000		

Balance Sheet as at 31-3-14

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine	70,000
		— Accumulated depreciation	7000
			63,000

Balance Sheet as at 31-3-15

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine 70,000	
		– Accumulated depreciation 14,000	56,000

Important Note :

- (1) As stated above, no effect of depreciation is given in machine account. From the cost price of machine, accumulated depreciation is deducted and shown in balance sheet for annual accounts purpose.
- (2) Alternatively, under this method asset is shown at cost price on assets side of balance sheet and depreciation provision accounts is shown on liabilities side.

11. Typical Illustrations

Illustration 6 : There is balance in machine account of ₹ 65,000 in the books of Kashvi Enterprise on 1-4-2015. This machine was purchased five year back. On this machine depreciation was computed as per straight line method, and total written off depreciation is ₹ 55,000.

Ans. : (1) Amount of annual depreciation as per straight line method = $\frac{\text{Total depreciation}}{\text{Total years of use}}$

$$= \frac{55,000}{5} = 11,000$$

Annual amount of depreciation = ₹ 11,000

(2) Cost price of machine = Opening balance of machine + Amount of depreciation till date

$$= 65,000 + 55,000$$

$$= 1,20,000$$

Cost price of machine = ₹ 1,20,000

Illustration 7 : Shrey Limited has purchased a machine on 1-4-14 for ₹ 1,20,000. Its installation expense is ₹ 30,000. If depreciation is charged at 15 % under straight line instalment method, disclose the effect in annual accounts of first year.

Ans. : R = Annual rate of depreciation = 15 %

C = Cost price of machine = Purchase price + Installation expense

$$= 1,20,000 + 30,000$$

$$= ₹ 1,50,000$$

Annual depreciation amount = D = $\frac{C \times R}{100}$

$$= \frac{1,50,000 \times 15}{100}$$

D = ₹ 22,500

Accounting Effect in Annual Account
Profit and Loss Account for the year ending 31-3-2015

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	22,500		

Balance Sheet as at 31-3-15

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine	1,50,000
		– Depreciation	<u>22,500</u>
			1,27,500

Illustration 8 : There was an opening balance of machine account on 1-4-15 in the book of Shruti Limited ₹ 1,05,000. This machine was purchased four years back. Under straight line method, 10 % depreciation is charged on this machine. From this information ascertain the amount of annual depreciation.

Necessary computation and explanation :

Under straight line method, the amount of depreciation is determined on the basis of cost price of machine. First of all, cost price of machine will be ascertained.

Assume cost price of machine is ₹ 100
 (–) Depreciation at 10 % for four years (10×4) ₹ 40
 ∴ Book value of machine at the end of fourth year ₹ 60

As given, book value of machine at the end of fourth year is ₹ 1,05,000.

If book value of at the end of fourth year ₹ 60 = cost price ₹ 100

∴ If book value of at the end of fourth year ₹ 1,05,000 = (?)

$$= \frac{1,05,000 - 100}{60} = 1,75,000$$

∴ Cost price of machine = ₹ 1,75,000

$$\text{Annual amount of depreciation} = \frac{C - R}{100}$$

Where, C = 1,75,000, R = 10 %

$$\begin{aligned} \therefore D &= \frac{C - R}{100} \\ &= \frac{1,75,000 - 10}{100} \end{aligned}$$

Annual amount of depreciation = ₹ 17,500

Ans. : Cost price ₹ 1,75,000

Annual amount of depreciation ₹ 17,500.

Illustration 9 : Yug & Co. had purchased one machine for ₹ 1,10,000 on 1-4-12. Installation cost of this machine was ₹ 6000 and carriage expense was ₹ 4000. Company provides 8 % depreciation under straight line method. On 31-3-15 this machine was sold at a loss of 20 % of book value. Prepare journal entries and machine account for three years.

Ans. : Necessary Calculation :

Annual depreciation :

$$\begin{aligned}\text{Cost price of machine} &= \text{Purchase price} + \text{Installation cost} + \text{Other expenses} \\ &= ₹ 1,10,000 + ₹ 6000 + ₹ 4000 \\ &= ₹ 1,20,000\end{aligned}$$

$$\text{Annual depreciation} = \text{Cost price of machine} \times \text{Depreciation rate}$$

$$= \frac{1,20,000 \times 8}{100} = ₹ 9600$$

Selling price of machine :

	₹
Cost price of machine on 1-4-12	1,20,000
(-) Depreciation of three years (₹ 9600 × 3)	28,800
∴ Book value of machine on 31-3-15	91,200
(-) Sales of 20 % loss (₹ 91,200 × 20 %)	18,240
∴ Selling price of machine	72,960

Journal Entries in the Book of Yug Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1-4-12	Machine A/c Dr To bank A/c To cash A/c (Being machine purchased for ₹ 1,10,000 and paid ₹ 10,000 for its installation and other expenses.)		1,20,000	1,10,000 10,000
31-3-13	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 9600 is charged.)		9600	9600
31-3-13	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 9600 is transferred to profit and loss account.)		9600	9600
31-3-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 9600 is charged.)		9600	9600

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 9600 is transferred to profit and loss account.)		9600	9600
31-3-15	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 9600 is charged.)		9600	9600
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 9600 is transferred to profit and loss account.)		9600	9600
31-3-15	Bank A/c Dr To machine A/c (Being machine of book value of ₹ 91,200 sold at loss of 20 %)		72,960	72,960
31-3-15	Profit and Loss A/c Dr To machine A/c (Being loss on sale of machine ₹ 18,240 is transferred to profit and loss account.)		18,240	18,240
	Total		2,68,800	2,68,800

Ledger of Yug & Company
Machine Account

Dr				Cr			
Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		1,10,000	31-3-13	By depreciation A/c		9600
1-4-12	To cash A/c		10,000	31-3-13	By balance c/d		1,10,400
			1,20,000				1,20,000
1-4-13	To balance b/d		1,10,400	31-3-14	By depreciation A/c		9600
			1,10,400	31-3-14	By balance c/d		1,00,800
1-4-14	To balance b/d		1,00,800	31-3-15	By depreciation A/c		9600
			1,00,800	31-3-15	By bank A/c		72,960
				31-3-15	By Profit and Loss A/c (Loss on sale of machine)		18,240
							1,00,800

Illustration 10 : Shushma Limited has purchased one machine for ₹ 52,000 on 1-4-12. Installation expense of machine was ₹ 3000. On 1-10-13 second machine purchased for ₹ 19,000, its installation cost was ₹ 1000. Company charges depreciation at 10 % under straight line method of depreciation. On 31-3-15, first machine was sold at profit of 20 % on book value.

Ans. : Necessary calculation : Selling price of first machine (which is sold) :

Cost price of machine = ₹ 52,000 + ₹ 3000 = ₹ 55,000

Annual depreciation amount (at 10 %) = $\frac{55000 \times 10}{100} = ₹ 5500$

Selling price of machine :

	₹
Cost price of machine on 1-4-12	55,000
(-) Depreciation at 10 % for three years (₹ 5500 × 3)	16,500
∴ Book value of machine on 31-3-15	38,500
(+) 20 % profit on ₹ 38,500	7700
∴ Selling price of machine	46,200

Depreciation on second machine :

Cost price on 1-10-13 ₹ 20,000.

Depreciation at 10 % for six months from 1-10-13 to 31-3-14 ₹ 1000.

Depreciation for 1-4-14 to 31-3-15 for entire year ₹ 2000.

Journal Entries in the Book of Shushma Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1-4-12	Machine A/c Dr To bank A/c To cash A/c (Being machine purchased for ₹ 52,000 and paid its installation expense ₹ 3000.)		55,000	52,000 3000
31-3-13	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 5500 is recorded.)		5500	5500
31-3-13	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 5500 is transferred to profit and loss account.)		5500	5500
1-10-13	Machine A/c Dr To bank A/c To cash A/c (Being machine purchased for ₹ 19,000 and paid its installation expense ₹ 1000.)		20,000	19,000 1000
31-3-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 5500 on first machine and ₹ 1000 on second machine is recorded.)		6500	6500

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
31-3-14	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 6500 is transferred to profit and loss account.)		6500	6500
31-3-15	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 5500 on first machine and ₹ 2000 on second machine is recorded.)		7500	7500
31-3-15	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 7500 is transferred to profit and loss account.)		7500	7500
31-3-15	Bank A/c Dr To machine A/c (Being first machine of book value of ₹ 38,500 sold at 20 % profit.)		46,200	46,200
31-3-15	Machine A/c Dr To profit and loss A/c (Being first machine sold on profit of ₹ 7700 and transferred it to profit and loss account.)		7700	7700
	Total		1,67,900	1,67,900

Ledger of Shushma Limited
Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		52,000	31-3-13	By depreciation A/c		5500
1-4-12	To cash A/c		3000	31-3-13	By balance c/d		49,500
			55,000				55,000
1-4-13	To balance b/d		49,500	31-3-14	By depreciation A/c (5500 + 1000)		6500
1-10-13	To bank A/c		19,000	31-3-14	By balance c/d		63,000
1-10-13	To cash A/c		1000				69,500
			69,500				
1-4-14	To balance b/d		63,000	31-3-15	By depreciation A/c (5500 + 2000)		7500
31-3-15	To profit and loss A/c (Profit)		7700	31-3-15	By bank A/c		46,200
				31-3-15	By balance c/d		17,000
			70,700				70,700

Depreciation Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
31-3-13	To machine A/c		5500	31-3-13	By profit and loss A/c		5500
			5500				5500
31-3-14	To machine A/c		6500	31-3-14	By profit and loss A/c		6500
			6500				6500
31-3-15	To machine A/c		7500	31-3-15	By profit and loss A/c		7500
			7500				7500

Illustration 11 : In the books of Sanket Enterprise, machine account has balance of ₹ 1,40,000 on 1-4-12. This machine was purchased on 1-4-09. Second machine was purchased on 1-1-14 for ₹ 1,10,000. Its installation expense was ₹ 10,000. Company provides annual depreciation at 10 % under straight line method. First machine was sold on 31-3-15 at 20 % loss on book value. From the above information prepare machine account for last three years, in the books of company.

Ans. : Necessary calculation and explanation :

- (1) Amount of annual depreciation is calculated on cost price of an asset under straight line method. First of all cost price of machine is to be ascertained.

Assume cost price of machine on 1-4-09 is ₹ 100

- (–) Depreciation of three years 1-4-09 to 31-3-12

(10 % → 10 × 3) ₹ 30

Book value of machine on 1-4-12 ₹ 70

∴ ₹ 70 book value = ₹ 100 cost price

∴ ₹ 1,40,000 book value = (?)

$$= \frac{1,40,000}{70} \times 100 = \text{Cost price of machine ₹ 2,00,000}$$

∴ On ₹ 2,00,000 depreciation will be charged at 10 % = ₹ 20,000 Annual depreciation

- (2) **Selling price of first machine :**

Book value on 1-4-12 ₹ 1,40,000

- (–) Depreciation upto 31-3-15 for 3 years ₹ 60,000

(20,000 × 3)

Book value on 31-3-15 ₹ 80,000

- (–) Loss (25 % of ₹ 80,000) ₹ 20,000

∴ Selling price of machine ₹ 60,000

- (3) Second machine was purchased on 1-1-14, thus depreciation of first year, will be calculated for the period of 3 months from 1-1-14 to 31-3-14 ₹ 3000.

$$\text{Depreciation} = \frac{1,20,000}{100} \times \frac{10}{12} \times \frac{3}{12} = ₹ 3000$$

- (4) Depreciation of second year for second machine (upto 31-3-15) ₹ 12,000.

Ledger of Sanket Enterprise
Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To balance b/d		1,40,000	31-3-13	By depreciation A/c		20,000
				31-3-13	By balance c/d		1,20,000
			1,40,000				1,40,000
1-4-13	To balance b/d		1,20,000	31-3-14	By depreciation A/c		23,000
1-1-14	To bank A/c		1,10,000		(20,000 + 3000)		
1-1-14	To cash A/c		10,000	31-3-14	By balance c/d		2,17,000
			2,40,000				2,40,000
1-4-14	To balance b/d		2,17,000	31-3-15	By depreciation A/c		32,000
					(20,000 + 12,000)		
				31-3-15	By bank A/c (sale)		60,000
				31-3-15	By P & L A/c (loss)		20,000
				31-3-15	By balance c/d		1,05,000
			2,17,000				2,17,000

Illustration 12 : In the books of Bulbul corporation, on 1-4-12, machine account shows balance of ₹ 90,000. This machine was purchased 5 years back. Till this date total amount of depreciation on this machine was ₹ 30,000. On 1-1-14 second machine was purchased for ₹ 18,000.

The second machine was not suitable and was sold on 31-12-14 at profit of 10 % on book value. Company charges depreciation at 5 %, every year under straight line method. From the above information prepare a machine account and depreciation account upto 31-3-15 in the books of company.

Ans. : Necessary calculation and explanation :

(1) Depreciation is calculated on cost price of asset under straight line method :

Book value of machine on 1-4-12	₹ 90,000
(+) Total depreciation charged for 5 years	₹ 30,000
∴ Cost price of machine before 5 years	<u>₹ 1,20,000</u>

Annual amount of depreciation on ₹ 1,20,000 at 5 % is ₹ 6000.

or

Total depreciation of 5 years is ₹ 30,000. Divide this amount with 5, annual depreciation will be

$$= \frac{30,000}{5} = ₹ 6000$$

(2) Selling price of second machine :

Purchase price (cost price) on 1-1-14	₹ 18,000
(-) 3 months depreciation 1-1-14 to 31-3-14	
∴ $\frac{18,000}{100} \times \frac{3}{12} =$	₹ 225
Book value after depreciation 1-4-14	₹ 17,775
(-) 9 months depreciation 1-4-14 to 31-12-14	
∴ $\frac{18,000}{100} \times \frac{9}{12} =$	₹ 675
∴ Book value after depreciation 31-12-14	₹ 17,100
(+) 10 % profit on book value ₹ 17,100	₹ 1710
∴ Selling price of machine	₹ 18,810

Ledger of Bulbul Corporation

Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To balance b/d		90,000	31-3-13	By depreciation A/c		6000
				31-3-13	By balance c/d		84,000
			90,000				90,000
1-4-13	To balance b/d		84,000	31-3-14	By depreciation A/c		6225
1-1-14	To bank A/c		18,000	(6000 + 225)			
	(purchased new machine)			31-3-14	By balance c/d		95,775
			1,02,000				1,02,000
1-4-14	To balance b/d		95,775	31-12-14	By depreciation A/c		675
31-12-14	To P & L A/c (profit)		1710	(for 9 months on machine sold)			
				31-12-14	By bank A/c		18,810
				(Machine sold)			
				31-3-15	By depreciation A/c		6000
				(For first machine)			
				31-3-15	By balance c/d		72,000
			97,485				97,485

Depreciation Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
31-3-13	To machine A/c		6000	31-3-13	By profit and loss A/c		6000
			6000				6000
31-3-14	To machine A/c		6225	31-3-14	By profit and loss A/c		6225
			6225				6225
31-3-15	To machine A/c		6675	31-3-15	By profit and loss A/c		6675
			6675				6675

Illustration 13 : Jayesh Limited had purchased some machines on 1-4-12 for ₹ 54,000. Installation expense for those machines was ₹ 6000. Company had purchased other machines on 1-10-14 for ₹ 47,000, its installation expense was ₹ 1000. Company provides depreciation every year at 10 % under straight line method. 40 % machines of first purchase were sold at 30 % profit on book value on 31-3-15.

Prepare machine account upto 31-3-15 and show accounting effect in final accounts for every year in the books of company.

Ans. : Necessary calculation and explanation :

(1) **Cost price of machines sold :**

Cost price of machines of first purchase ₹ 60,000 (₹ 54,000 + ₹ 6000 installation expense),
40 % of its are sold.

$$\frac{60,000 \times 40}{100}$$

= ₹ 24,000 machines sold

	₹
Cost price of machines sold	24,000
(-) Total depreciation at 10 % (2400 × 3)	7200
∴ Book value of machines sold on 31-3-15	16,800
(+) 30 % profit on book value $\left(\frac{16,800 \times 30}{100}\right)$	5040
∴ Selling price of machines sold	<u>21,840</u>

(2) First year depreciation will be calculated for 6 months on 31-3-15, for the machines which were purchased on 1-10-14. Thus depreciation on those machines will be ₹ 2400 (₹ 47,000 + ₹ 1000, 10 % for 6 months.)

Ledger of Jayesh Limited
Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		54,000	31-3-13	By depreciation A/c		6000
1-4-12	To cash A/c		6000	31-3-13	By balance c/d		54,000
			60,000				60,000
1-4-13	To balance b/d		54,000	31-3-14	By depreciation A/c		6000
			54,000	31-3-14	By balance c/d		48,000
1-4-14	To balance b/d		48,000				54,000
1-10-14	To bank A/c (purchase)		47,000	31-3-15	By depreciation A/c (6000 + 2400)		8400
1-10-14	To cash A/c (installation exp.)		1000	31-3-15	By bank A/c (sale)		21,840
31-3-15	To profit-loss A/c		5040	31-3-15	By balance c/d		70,800
			1,01,040				1,01,040

Accounting Effect in Annual Accounts

Profit and Loss Account for the Year Ending 31-3-2013

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	6000		

Profit and Loss Account
for the Year Ending 31-3-2014

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	6000		

Profit and Loss Account
for the Year Ending 31-3-2015

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation A/c	8400		

Balance Sheet as at 31-3-13

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machines	60,000
		– Depreciation	6000
			54,000

Balance Sheet as at 31-3-14

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machines	54,000
		– Depreciation	6000
			48,000

Balance Sheet as at 31-3-15

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machines	48,000
		+ New purchase	48,000
			96,000
		– Sale (40 % of first sale)	16,800
			79,200
		– Depreciation (6000 + 2400)	8400
			70,800

Illustration 14 : P. D. Corporation has balance in machine account ₹ 65,000 on 1-4-14. Company charges depreciation every year at 10 % under reducing balance method. On 30-9-14 machine was sold at 10 % loss of book value.

From the above information pass necessary journal entries and machine account in the books of company.

Ans. : Necessary calculation and explanation :

Depreciation on machine will be calculated on opening balance for six month, under reducing balance method.

	₹
Balance of machine on 1-4-14	65,000
(–) Depreciation of 6 months = $\frac{65,000 \times 10}{100} \times \frac{6}{12}$	3250
∴ Book value of machine on 30-9-14	61,750
(–) 10 % loss on ₹ 61,750	6175
∴ Selling price of machine	55,575

Journal Entries in the Book of P. D. Corporation

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
30-9-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 3250 is recorded.)		3250	3250
30-9-14	Bank A/c Dr Loss on sale of machine A/c Dr To machine A/c (Being machine of ₹ 61,750 sold at 10 % loss)		55,575 6175	61,750
31-3-15	Profit and loss A/c Dr To depreciation A/c (Being depreciation of ₹ 3250 transferred to profit and loss account.)		3250	3250
	Total		68,250	68,250

Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-14	To balance b/d		65,000	30-9-14	By depreciation A/c		3250
				30-9-14	By loss on sale of machine A/c		6175
				30-9-14	By bank A/c		55,575
			65,000				65,000

Illustration 15 : Saksham Limited had purchased one machine on 1-4-12 for ₹ 74,000, its installation cost was ₹ 6000. On 1-10-13 second machine was purchased for ₹ 68,000, its installation expense paid ₹ 4000. Company provides depreciation at 10 % every year, under reducing balance method. First machine was sold at 20 % loss of book value on 31-3-15. From the above information, prepare Machine account for three years and pass journal entries for the first year.

Ans. : Necessary calculation and explanation :

(1) Selling price of first purchase :	₹
Cost price of machine on 1-4-12	80,000
(–) Depreciation at 10 % for first year	8000
Book value of machine on 1-4-13	72,000
(–) Depreciation at 10 % for second year	7200
Book value of machine on 1-4-14	64,800
(–) Depreciation at 10 % for third year	6480
Book value of machine on 31-3-15	58,320
(–) 20 % loss on ₹ 58,320	11,664
∴ Selling price of machine	46,656

(2) Depreciation of second machine :	₹
Cost price of machine on 1-10-13	72,000
(–) Depreciation of 6 months, upto 31-3-14 = $\frac{72,000}{100} \times \frac{10}{12} \times \frac{6}{12}$	3600
Book value of machine on 1-4-14	68,400
(–) Depreciation upto 31-3-15	6840
∴ Book value of machine on 31-3-15	61,560

Journal Entry of Saksham Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
1-4-12	Machine A/c Dr To bank A/c To cash A/c (Being machine purchased for ₹ 74,000 and paid its installation expense ₹ 6000.)		80,000	74,000 6000
31-3-13	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 8000 is charged.)		8000	8000
31-3-13	Profit and Loss A/c Dr To depreciation A/c (Being depreciation of ₹ 8000 is transferred to profit and loss account.)		8000	8000
	Total		96,000	96,000

Ledger of Saksham Limited
Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		74,000	31-3-13	By depreciation A/c		8000
1-4-12	To cash A/c		6000	31-3-13	By balance c/d		72,000
			80,000				80,000
1-4-13	To balance c/d		72,000	31-3-14	By depreciation A/c (7200 + 3600)		10,800
1-10-13	To bank A/c		68,000				
1-10-13	To cash A/c		4000	31-3-14	By balance c/d		1,33,200
			1,44,000				1,44,000
1-4-14	To balance c/d		1,33,200	31-3-15	By depreciation A/c (6480 + 6840)		13,320
				31-3-15	By bank A/c (Selling price of machine)		46,656
				31-3-15	By P & L A/c (Loss)		11,664
				31-3-15	By balance c/d		61,560
			1,33,200				1,33,200

Illustration 16 : Kirtan Enterprise had balance of ₹ 80,000 in the account of furniture and fixtures on 1-4-2012. As per requirement of institute old furniture was purchased for ₹ 47,000 on 1-7-13, for which installation and other necessary expenses were incurred of ₹ 13,000. Furniture which was purchased on 1-7-13 was not found suitable and sold for ₹ 35,000 on 31-3-15. Every year 10 % depreciation is charged on asset under reducing balance method.

From the above information prepare furniture and fixture account upto 31-3-15.

Ans. : Necessary calculation and explanation :

(1) Computation of depreciation on furniture of 1-4-12	₹
Opening balance on 1-4-12	80,000
(-) Depreciation on 31-3-13	8000
Opening balance on 1-4-13	72,000
(-) Depreciation on 31-3-14	7200
Opening balance on 1-4-14	64,800
(-) Depreciation on 31-3-15	6480
∴ Book value on 31-3-15	<u><u>58,320</u></u>

(2) **Computation for old furniture purchased on 1-7-13** ₹

Cost price on 1-7-13 = 47,000 + 13,000	60,000
(-) Depreciation as on 31-3-14 for 9 months = $\frac{60,000}{100} \times \frac{10}{12} \times \frac{9}{12}$	4500
Book value on 1-4-14	55,500
(-) Depreciation on 31-3-15	5550
∴ Book value on 31-3-15	49,950
(-) Selling price	35,000
∴ Loss on sale of furniture	14,950

Ledger of Kirtan Enterprise
Furniture and Fixtures Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To balance b/d		80,000	31-3-13	By depreciation A/c		8000
				31-3-13	By balance c/d		72,000
			80,000				80,000
1-4-13	To balance b/d		72,000	31-3-14	By depreciation A/c		11,700
1-7-13	To bank A/c		47,000		(7200 + 4500)		
1-7-13	To cash A/c		13,000	31-3-14	By balance c/d		1,20,300
			1,32,000				1,32,000
1-4-14	To balance b/d		1,20,300	31-3-15	By depreciation A/c		12,030
					(6480 + 5550)		
				31-3-15	By bank A/c		35,000
				31-3-15	By P & L A/c (Loss)		14,950
				31-3-15	By balance c/d		58,320
			1,20,300				1,20,300

Illustration 17 : Yusuf Dodawala Corporation has purchased machine for ₹ 70,000 on 1-4-12. On 1-10-12 purchased second machine for ₹ 40,000. On 31-1-15, second machine sold at 20 % profit of book value. Company provides depreciation at 10 % every year under reducing balance method. Prepare machine account, from above information and show accounting effect in annual account of first year.

Ans. : Necessary calculation and explanation :

(1) Computation of depreciation on first machine purchased on 1-4-12 :

	₹
Cost price of machine purchased on 1-4-12	70,000
(-) Depreciation of first year at 10 %	7000
Book value of machine on 1-4-13 (Opening balance)	63,000
(-) Depreciation of second year at 10 %	6300
Book value of machine on 1-4-14 (Opening balance)	56,700
(-) Depreciation of third year at 10 %	5670
∴ Book value of machine on 31-3-15	51,030

(2) Computation of depreciation on second machine purchased on 1-10-12 :

	₹
Purchase of machine on 1-10-12	40,000
(-) Depreciation of first year of six months	2000
Book value of machine on 1-4-13 (Opening balance)	38,000
(-) Depreciation of second year	3800
Book value of machine on 1-4-14 (Opening balance)	34,200
(-) Depreciation upto 31-1-15 for 10 months = $\frac{34,200}{100} \times \frac{10}{12}$	2850
∴ Book value of machine on 31-3-15	31,350
(+) 20 % profit on 31,350 = $\frac{31,350}{100} \times 20$	6270
∴ Selling price of machine	37,620

Total Ledger of Yusuf Dodawala Corporation

Machine Account				Cr			
Dr							
Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-12	To bank A/c		70,000	31-3-13	By depreciation A/c (7000 + 2000)		9000
1-10-12	To bank A/c		40,000	31-3-13	By balance c/d		1,01,000
			1,10,000				1,10,000
1-4-13	To balance b/d (63,000 + 38,000)		1,01,000	31-3-14	By depreciation A/c (6300 + 3800)		10,100
				31-3-14	By balance c/d (56,700 + 34,200)		90,900
			1,01,000				1,01,000
1-4-14	To balance b/d		90,900	31-1-15	By depreciation A/c (sold)		2850
31-1-15	To P & L A/c (Profit on sale of machine)		6270	31-1-15	By bank A/c (sold)		37,620
				31-3-15	By depreciation (on remaining machine)		5670
				31-3-15	By balance c/d		51,030
			97,170				97,170

Accounting Effect in Annual Accounts
Profit and Loss Account for the Year Ending 31-3-2013

Dr

Cr

Particulars	Amount (₹)	Particulars	Amount (₹)
To machine depreciation	9000		

Balance Sheet as at 31-3-13

Capital-Liabilities	Amt. (₹)	Assets	Amt. (₹)
		Machine	1,10,000
		– Depreciation	9000
			1,01,000

Illustration 18 : On 1-4-14 in the books of Riya Industries balance of machine account was on ₹ 24,000. This machine was purchased six years back. Every year, company charges depreciation at 10 % under straight line method. On 30-9-14 this was sold at 30 % loss of book value. From the above information pass journal entries in the books of company and prepare machine account.

Ans. : Necessary calculation and explanation :

(1) Ascertain cost price of machine :

Under straight line method annual amount of depreciation is charged on cost price of asset. Thus, first of all cost price of machine will be ascertained as follows :

	₹
Assume before six years cost price of machine was	100
(–) Depreciation at 10 % for six years, total depreciation (10 × 6)	60
Balance of machine account on 1-4-14	40
If book value ₹ 40 = cost price ₹ 100	
∴ If book value ₹ 24,000 = cost price (?)	
$= \frac{24,000}{40} \times 100 = ₹ 60,000$	cost price of machine

∴ Every year at 10 % on ₹ 60,000 = ₹ 6000 will be annual depreciation.

(2) Ascertain selling price of machine :

	₹
Opening balance of machine on 1-4-14	24,000
(–) Depreciation at 10 % for six month upto 30-9-14	3000
∴ Book value of machine on 30-9-14	21,000
(–) 30 % loss on book value $\left(\frac{21,000 \times 30}{100} \right)$	6300
∴ Selling price of machine sold	14,700

Journal Entry in the Books of Riya Industries

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
30-9-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 3000 is recorded.)		3000	3000
30-9-14	Bank A/c Dr To machine A/c (Being machine of ₹ 21,000 is sold at loss of 30 %)		14,700	14,700
30-9-14	Loss on sale of machine A/c Dr To machine A/c (Being loss on sale of machine is recorded.)		6300	6300
31-3-15	Profit and Loss A/c Dr To depreciation A/c To loss on sale of machine A/c (Being depreciation of ₹ 3000 and loss on sale of machine ₹ 6300, transferred to P & L A/c.)		9300	3000 6300
	Total		33,300	33,300

**Ledger of Riya Industries
Machine Account**

Dr				Cr			
Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-14	To balance b/d		24,000	30-9-14	By depreciation A/c		3000
				30-9-14	By bank A/c (Sale)		14,700
				30-9-14	By loss on sale of machine A/c (Loss)		6300
			24,000				24,000

Illustration 19 : On 1-4-14 in the books of Vijay & Company, balance of machine account was of ₹ 87,480. This machine was purchased 3 years back. Depreciation on machine is charged at 10 % every year under reducing balance method. Ascertain the cost price of machine and annual amount of depreciation as on 31-3-15.

Ans. : Necessary calculation and explanation :

- (1) Assume before three years on 1-4-11 cost price of machine is ₹ 100.

	₹
Cost price of machine on 1-4-11	100
(-) Depreciation of first year at 10 %	10
∴ Opening balance of machine on 1-4-12	90
(-) Depreciation of second year at 10 %	9
∴ Opening balance of machine on 1-4-13	81
(-) Depreciation of three year at 10 %	8.1
∴ Opening balance of machine on 1-4-14	<u>72.90</u>

If balance of machine is ₹ 72.90 = Cost price of machine ₹ 100

∴ Balance of machine is ₹ 87,480 = Cost price of machine ₹ (?)

$$= \frac{87,480 \times 100}{72.9} = ₹ 1,20,000 \text{ cost price of machine}$$

∴ Cost price of machine ₹ 1,20,000

(2) **Annual depreciation amount on 31-3-15 :**

$$= \frac{\text{Opening balance of machine} \times \text{Depreciation rate}}{100} = \frac{87,480 \times 10}{100} = ₹ 8748$$

∴ Annual depreciation amount ₹ 8748

Illustration 20 : In the books of Joseph Limited, balance of machine account was ₹ 1,10,000 on 1-4-14.

Every year company charges depreciation at 5 % on reducing balance method. On 30-9-14 this machine is sold at a loss of 30 % on book value. From the above information pass necessary journal entries and prepare machine account in the books of company.

Ans. : Necessary calculation and explanation :

Ascertain selling price of machine :

₹

Book value of machine on 1-4-14	1,10,000
(-) Depreciation at 5 % for six months upto 30-9-14 = $\frac{1,10,000 \times 5 \times 6}{100 \times 12}$	2750
∴ Depreciation cost (book value) 30-9-14	1,07,250
(-) Sale at loss of 30 % of 1,07,250	32,175
∴ Selling price of machine	75,075

Journal Entry of Joseph Limited

Date	Particulars	L.F.	Debit (₹)	Credit (₹)
30-9-14	Depreciation A/c Dr To machine A/c (Being depreciation of ₹ 2750 is charged.)		2750	2750
30-9-14	Bank A/c Dr To machine A/c (Being machine of book value of ₹ 1,07,250 sold at 30 % loss)		75,075	75,075
30-9-14	Loss on sale of machinery A/c Dr To machine A/c (Being loss on sale of machine ₹ 32,175 is transferred to loss on sale of machine A/c.)		32,175	32,175
31-3-15	Profit and Loss A/c Dr To depreciation A/c To loss on sale of machinery A/c (Being depreciation of ₹ 2750 and loss on sale of machine ₹ 32,175 are transferred to profit and loss account.)		34,925	2750 32,175
	Total		1,44,925	1,44,925

Ledger of Joseph Limited
Machine Account

Dr

Cr

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1-4-14	To balance b/d		1,10,000	30-9-14	By depreciation A/c		2750
				30-9-14	By bank A/c (sale of machine)		75,075
				30-9-14	By P & L A/c (Loss)		32,175
			1,10,000				1,10,000

Exercise

1. Select correct option for each question :

- (1) Depreciation is what kind of expense of business ?
 - (a) Capital
 - (b) Revenue
 - (c) Capital and Revenue
 - (d) Fictitious
- (2) On which price of asset, depreciation is calculated under straight line method ?
 - (a) Book value
 - (b) Depreciated price
 - (c) Selling price
 - (d) Cost price
- (3) Depreciation indicates in useful value of assets.
 - (a) Increase
 - (b) Reduction
 - (c) Increase-reduction
 - (d) None of the above three
- (4) Under which method the annual amount of depreciation remains identical ?
 - (a) Straight line method
 - (b) Reducing balance method
 - (c) Revaluation method
 - (d) Mileage method
- (5) Which of the following asset is not depreciable ?
 - (a) Building
 - (b) Furniture
 - (c) Machines
 - (d) Land
- (6) Under which method of depreciation, value of asset never becomes zero ?
 - (a) Reducing balance method
 - (b) Annuity method
 - (c) Depletion unit method
 - (d) Equal instalment method
- (7) Under which method of depreciation, balance is maintained between depreciation amount and repairing expense ?
 - (a) Machine hour method
 - (b) Compound interest method
 - (c) Reducing balance method
 - (d) Straight line method
- (8) To which of the following depreciation is applicable ?
 - (a) Capital
 - (b) Sales
 - (c) Liabilities
 - (d) None of the above three

- (9) Which of the following expense is not paid in cash ?
 (a) Rent (b) Commission
 (c) Salary (d) Depreciation
- (10) Where does the loss on sale of machine will be recorded ?
 (a) Credit side of machine account (b) Debit side of machine account
 (c) Credit side of depreciation account (d) Debit side of depreciation account

2. Answer the following question in one sentence :

- (1) Under which method annual amount of depreciation reduces every year ?
- (2) What are depreciable assets ?
- (3) Explain the meaning of depreciation.
- (4) On which assets of business, depreciation is calculated ?
- (5) Write journal entry to transfer depreciation to profit and loss account at the end of the year.
- (6) Write the formula to determine the depreciation rate under equal instalment method.
- (7) Describe different methods to record depreciation on assets from the view point of accounting.
- (8) Which account is credited to record depreciation under depreciation provision method ?
- (9) Where and how depreciation is disclosed in the balance sheet ?
- (10) To which account and side, profit on sale of asset is recorded ?

3. Answer the following question in brief :

- (1) One machine was purchased on 1-4-08. On 1-4-14 the opening balance of machine account is ₹ 28,000. Depreciation on machine is charged at 10 % under straight line method. Write journal entry for depreciation on 31-3-15.
- (2) One machine was purchased on 1-4-13 for ₹ 30,000. Depreciation on machine is charged at 10 % under reducing balance method. Write journal entry for depreciation on 31-3-15.
- (3) On 1-4-14 book value of machine was ₹ 34,000. Depreciation is calculated at 20 % under reducing balance method. This machine was sold at 35 % profit on book value on 30-9-2014. From this information write journal entry for sale of machine.
- (4) Hiral Limited charges depreciation on its assets at 5 % under straight line method. If annual depreciation amount is ₹ 6000, determine cost price of machines.
- (5) Sarvesh Limited has purchased a machine on 1-4-13. By charging depreciation at 10 % under reducing balance method, ₹ 3240 is recorded as depreciation on 31-3-15, determine cost price of machine.

4. Answer the following question to the point :

- (1) Explain the meaning of depreciation and describe its characteristics.
- (2) What are the objectives for charging depreciation ?
- (3) Define depreciation and discuss factors of depreciation.
- (4) Explain the factors in detail to be kept in mind to determine annual amount of depreciation and rate of depreciation.

- (5) What are depreciable assets ? Give its explanation and list out depreciable assets.
- (6) Write short-note : (a) Equal instalment method
(b) Reducing balance method
- (7) Give difference : Equal instalment method and reducing balance method
- (8) Explain, different methods for recording of depreciation in books of accounts.

5. Answer the following questions as directed :

- (1) Suresh Limited has purchased machine for ₹ 63,600 on 1-4-2012. Installation expense of machine was incurred ₹ 1000. If scrap value is estimated to be ₹ 14,600 after its estimated life of 8 years, determine annual amount of depreciation and annual rate of depreciation. Accounting year of company ends on 31st March. Write journal entries for first three years and also prepare machine account and depreciation account. Show accounting effect in annual accounts of first year. Company charges depreciation under straight line method of depreciation.
- (2) On 1-4-13 Hansa Limited has balance in machine account in its books of ₹ 36,000. This machine was purchased seven years back. This machine was sold at 30 % profit of its book value on 31-3-14. Every year company charges depreciation at 10 % under straight line method. From the above information pass necessary journal entries and prepare machine account.
- (3) On 1-4-12, Harun Dodawala Industry has purchased machine for ₹ 2,75,000. The installation expense of this machine was ₹ 15,000 and carriage was ₹ 10,000. Company provides depreciation at 8 % every year under straight line method. This machine was sold at 20 % loss of book value on 31-3-15. Pass journal entries for three years and machine account for three years.
- (4) Kaushik Corporation has purchased machine for ₹ 1,24,000 on 1-4-12. The carriage and installation expense of this machine was ₹ 16,000. The repairing expense of ₹ 20,000 was incurred before putting this machine for production. On 1-10-13 second machine was purchased for ₹ 1,36,000, its installation expense was of ₹ 8000. First machine was sold on 30-9-14 at 40 % loss of book value.
Prepare machines account upto 31-3-15 and show its accounting effect in the annual accounts of 2012-13. Company provides depreciation on machines at 10 % every year under straight line method.
- (5) Machine account shows balance of ₹ 60,000 in the books of Mehta Limited on 1-4-12. This machine was purchased five years back. Till today, total depreciation written off on this machine was of ₹ 20,000. On 1-1-14 second machine was purchased for ₹ 12,000.
Second machine was not found suitable, and sold at 10 % loss of book value on 31-12-14. Every year company provides depreciation at 5 % under straight line method.
From the above information prepare machine account and depreciation account in the books of company upto 31-3-15.
- (6) Raj Kumar Limited had purchased some machines for ₹ 82,000 on 1-4-2012. The installation expense of this machine was of ₹ 8000. On 1-10-14 company purchased another machines

for ₹ 70,000 and their installation expense was of ₹ 2000. Company provides depreciation at 10 % every year under straight line method. 30 % machines from first purchase were sold at 20 % profit of book value on 31-3-15.

From the above information prepare machines account upto 31-3-15 as well as show accounting effect in annual accounts of each year.

- (7) Sharma Limited has purchased a machine for ₹ 67,000 on 1-4-12. Installation expense of this machine was ₹ 3000. Depreciation is to be provided at 10 % every year under reducing balance method.

Ascertain amount of depreciation, pass journal entries and prepare machine account and depreciation account for first three years. Show accounting effect in annual accounts of first two years.

- (8) Machine account shows balance of ₹ 60,000 in the books of Betul & Company on 1-4-14. Company provides depreciation at 10 % every year under reducing balance method. This machine was sold at 25 % loss on book value on 1-10-14.

From the above information pass necessary journal entries and prepare machine account to the books of company.

- (9) Sudhanshu Limited has purchased one machine for ₹ 22,200 on 1-4-12, its installation expense was of ₹ 1800. Another second machine was purchased on 1-10-13 for ₹ 20,400 and its installation expense paid ₹ 1200. Every year, company provides depreciation at 10 % under reducing balance method. On 31-3-15 first machine was sold at 20 % loss of its book value.

From the above information pass journal entries for first year and prepare Machine account for first three years in the books of company.

- (10) Bhalchandra Manufacturing Limited has purchased one machine for ₹ 73,000 on 1-4-2012. Its installation expense was of ₹ 2000. It was decided to provide depreciation at 8 % under straight line method. Company records depreciation by creating depreciation provision.

From the above information pass journal entries, prepare depreciation provision account, depreciation account for first two years in the books of company.

- (11) Jenet Limited has purchased one machine for ₹ 78,000 on 1-4-2013. Its installation expense was of ₹ 2000. On this machine depreciation is to be provided at 10 % under reducing balance method. This depreciation is to be recorded by creating depreciation provision account (Accumulated depreciation account).

From the given information, pass journal entries of first two years and show its accounting effect in annual accounts of first two years in the books of company.

