

# Depreciation

## Depreciation- Meaning, Reasons and Requirement

### Objectives

After going through this lesson, you shall be able to understand the following concepts.

- Concept of Depreciation
  - Causes of Depreciation
  - Need for Providing Depreciation

### Introduction

We know that a sole proprietor commences business with capital in the form of various assets and liabilities. The assets can be in form of fixed assets (or long-term assets) and current assets. Both the type of assets are acquired to carry out various business activities. Fixed assets are used for the production of various goods and services whereas, current assets are consumed for production of various goods and services of a business. Fixed assets are used continuously in the daily business operations. Therefore, with the passage of time and their consistent use in the business their value may decrease due to normal wear and tear. This decrease or *fall in the value of the fixed assets is termed as Depreciation*. In this lesson, our basic focus will be on the reduction in the value of fixed assets and its various causes.

### Meaning of Depreciation

Reduction in the value of fixed assets associated with their continuous use in the business is regarded as Depreciation. Depreciation is a permanent decrease in the value of fixed asset. All the fixed assets, except land, have specific useful life in the business. Generally, the total cost of an asset is spread over its useful life in the business and this allocation of cost is regarded as Depreciation. Thus, it can be said that depreciation is an ***allocation of cost of an asset*** over its useful life and is ***not a valuation process of the asset***.

It should be noted that generally no depreciation is provided on land. This is because land is assumed to have an infinite life in the business.

According to William Pickles, '*Depreciation is the permanent and continuing diminution in the quality, quantity or value of an asset*'.

In the words of J.R. Batliboi, '*It is a matter of common knowledge that all fixed assets such as plant, machinery, building, furniture, etc. gradually diminish in value as they get older and become worn out by constant use in the business*'.

According to the Matching Concept, Depreciation is considered as an expense only to the extent of the decrease in the value of the asset during an accounting period. In other words, it refers to value of fixed asset consumed in the production process during an accounting period.

As depreciation is a reduction or loss in the value of fixed assets, therefore, it is charged from the revenues earned by a business. It is charged by recording it on the Debit side of the Profit and Loss Account.

### **Features of Depreciation**

The following are the various features of depreciation.

1. It is a fall in the book value of fixed assets.
  2. It occurs due to normal wear and tear or obsolescence of technology during its use in the business.
- iii. It does not affect the market value of fixed asset. It only reduces the book value of the asset.
1. The decrease in the value of fixed asset is permanent in nature.
  2. It is an allocation of the cost of asset over its effective life.
  3. It is charged only on the Tangible fixed assets. Tangible fixed assets are those which can be seen or touched such as Building, Machinery, Furniture, etc.
- vii. It is a non-cash expense of a business which does not involve any outflow of cash.

### **Causes of Depreciation**

Given below are the various causes of depreciation.

1. **Continuous Use**-The continuous use of the fixed assets in the business operations leads to reduction in their value due to the natural factors such as sun light, rain, gas, etc. Therefore, it can be said that depreciation occurs due to the normal wear and tear and constant use of the fixed assets in the business.
2. **Expiry of Useful Life**-All the fixed assets (except land) have only some specific life for which they are useful in the business. With the passage of time there is always a fall in the value of fixed assets irrespective of the fact whether they are used or not. This fall in the value can be due to the natural forces such as rain, weather, etc.

3. **Obsolescence**-Due to the fast technological innovations and inventions, the existing assets may get outdated. In such cases, the old assets are needed to be replaced by new technologically sophisticated assets. This leads to the obsolescence of fixed assets which need to be replaced even if their useful life has not expired.
4. **Expiration of Legal Rights**-If an asset is acquired for a specific period of time, then, whether the asset is put to use or not, its value becomes zero at the end of its useful life. For example, if a building is acquired at a cost of Rs 1,00,000 for 10 years on lease, then each year its value depreciates by  $1/10^{\text{th}}$  of its gross value and at the end of  $10^{\text{th}}$  year, the value of the building will be zero in the books.
5. **Accidents**-An asset may lose its value or get damaged due to some mishaps such as fire, accident, theft or a natural calamity. Loss due to an accident is permanent in nature, in the sense, that such assets cannot be used further in the business as they have been permanently destroyed by the accident.
6. **Permanent Reduction in the Market Value**- Generally, the fluctuations in the market price of the fixed assets is not recorded in the Books of accounts. However, if the fall in market price is permanent, then it is recorded in the books because it leads to a fall in the value of fixed assets.

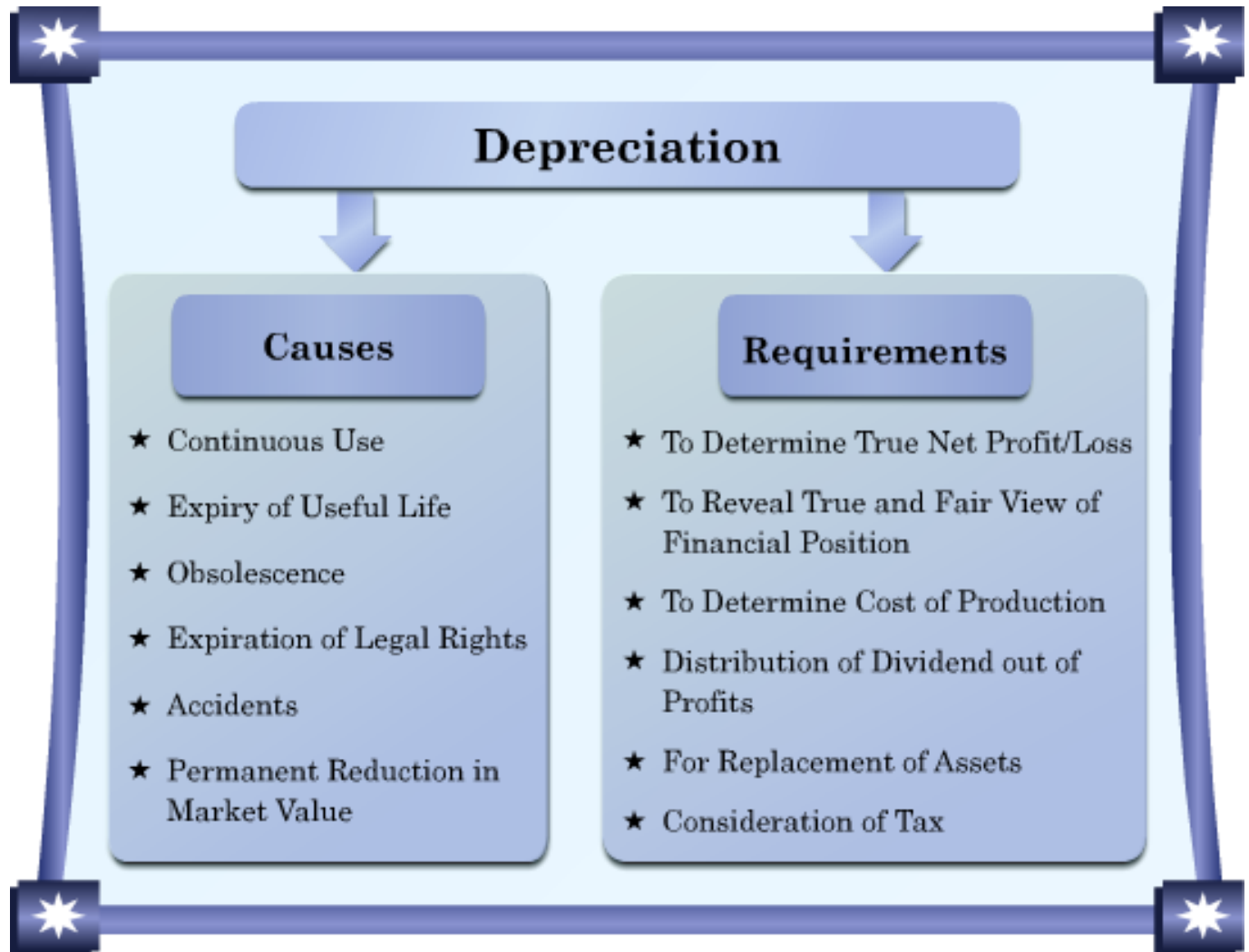
### **Need for Providing Depreciation**

The following are the various reasons due to which there arises a need for providing depreciation.

7. **To Determine True Net Profit or Net Loss**-Correct profit or loss can be ascertained only when all the expenses and losses incurred during an accounting period for earning revenues are charged to Profit and Loss Account. Assets are used in various business operations for earning revenues and therefore, its cost should be charged in the form of depreciation from the Profit and Loss Account. Therefore, if depreciation is not charged, then the net result shown by the Profit and Loss Account would not reveal the true profit or loss.
8. **To Reveal True and Fair View of Financial Position**-If depreciation is not charged in the books, then assets would be shown at higher value than their actual value in the Balance Sheet. Consequently, the Balance Sheet fails to reflect the true and fair view of the Financial Position of a business at the end of an accounting period.
9. **To Determine Cost of Production**-Depreciation on Plant and Machinery and on other assets, which are engaged in production, is included in the cost of production. Cost of production is a basis for determining the selling price of products in the market. Therefore, if depreciation is not provided,

then the cost of production is underestimated, which will lead to the low sale price in the market and thus leads to the lower profits.

10. **Distribution of Dividend Out of Profit**-In case depreciation is not charged from the revenues, the profit shown by the Profit and Loss Account will be more than actual. This may lead to the distribution of more profits as dividend out of capital instead of retaining the profit in the business. This will in turn lead to the flight of scarce capital out of the business.
11. **For Replacement of Assets**-Unlike other expenses, depreciation is not a cash expense, rather it is a non-cash transaction. So, the amount of depreciation charged will be retained in the business. This amount, in the future can be used for replacement of fixed assets after its useful life.
12. **Consideration of Tax**-When depreciation is charged, Profit and Loss Account will disclose lesser profit as compared to when depreciation is not charged. This depicts the reduced profits and thus the business will be liable for lesser tax amount.



### Other Terminologies related to Depreciation

- **Depletion**-This term refers to the reduction in availability of natural resources due to extraction, mining and quarrying. It helps to ascertain the reduction in product reserves of natural resources. In other words, it refers to the amount of natural resources used or consumed during an accounting period.
- **Obsolescence**-This term refers to the loss in the capital value of the existing fixed assets that is not physically worn out. This reduction in the value takes place due to the advancement and appreciation of technology, scientific innovations and inventions, change in fashion, adoption of cost efficient production techniques, etc.
- **Amortisation**-This term refers to the reduction in the value of intangible assets over its useful life. Intangible assets are those assets which do not have physical existence such as, Goodwill, Copyrights, Patents, etc. It measures the amount of intangible assets used during an accounting period.

## Determinants of Depreciation & Methods of Recording

### Objectives

After going through this lesson, you shall be able to understand the following concepts.

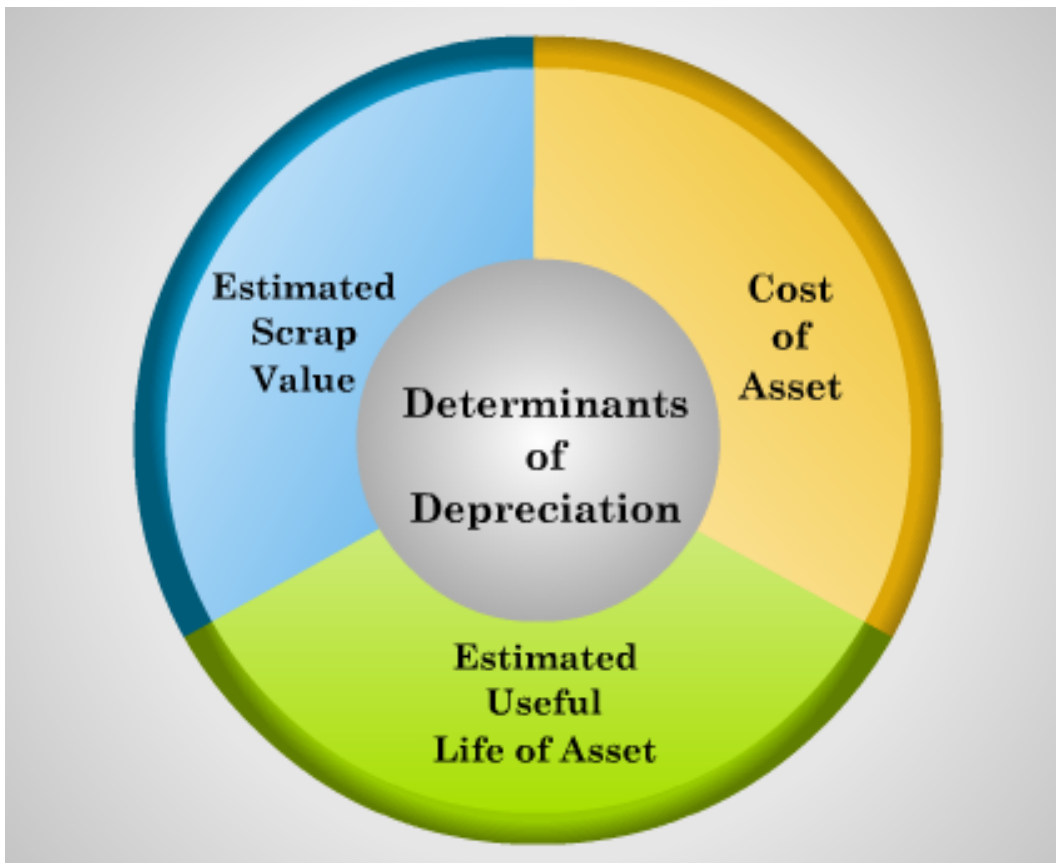
- Determinants of Depreciation
  - Recording of Depreciation

### Determinants of Depreciation

We know depreciation is the fall in the value of fixed assets that are used in the business operations. The calculation of the exact amount of depreciation is a troublesome process. It is generally based on estimations. However, efforts are made that estimated depreciation calculated is precise and exact. The given below are some factors that helps in determining the actual amount of depreciation.

1. **Cost of Asset**-For the purpose of calculating the amount of depreciation, the total cost of asset should be considered. All the expenses incurred in relation to acquiring, installing and construction of an asset and bringing the asset into usable condition are included in the total cost of the asset. Some of the examples of such costs are freight, installation cost, transit insurance cost, etc. An important point to be noted here is that the cost of asset never includes the financial charges such as interest on loan taken to purchase the fixed assets, etc.

2. **Estimated Useful Life of Asset**-Another factor determining the amount of depreciation is estimated useful life of the asset. The useful life of assets may be in terms of number of months, years, hours, units, etc. Every asset has its useful life other than its physical life. An asset may have a physical existence but may not be able to perform its functions. For instance, if machinery is purchased for carrying out business operations whose useful life is 10 years. But, it is expected to last only for 6 years. In such a case, the estimated useful life of the machinery will be considered only for 6 years and not 10 years.
3. **Estimated Scrap Value**-Scrap value is residual value or salvage value that is expected to be realised from the sale of the asset at the end of its expected useful life. Before providing the depreciation, the scrap value should be deducted from the cost of the asset. This net value of the assets i.e. difference of cost of assets and scrap value is considered as base for charging depreciation. Algebraically, it can be written as-  
Amount to be Written-off = Cost of Asset – Scrap Value  
*For example,* Furniture is acquired at cost of Rs 2,00,000 with its effective life of 10 years. After 10 years, furniture is expected to realise Rs 20,000. In this case, the cost of asset that should be considered for charging depreciation is Rs 1,80,000 (2,00,000 – 20,000). That is, the cost after deducting its scrap value.



**Legal Provisions:** Law has prescribed guidelines for the method of charging depreciation and rate at which it is to be charged. A business entity must refer to them to avoid any confusion at later stages.

### **Treatment of GST Paid to a Vendor**

When a business firm purchases a machine and GST is to be paid, it will be debited to Input GST Account. This is because a firm can obtain benefit from it in the form of Input tax credit and can adjust it against the GST received on sale i.e. Output GST.

**Example:** Keshav Ltd. purchased machinery on 1<sup>st</sup> November, 2018 for Rs. 8,00,000 plus CGST and SGST @ 9% each. He paid Rs. 15,000 as freight and Rs. 20,000 as loading/unloading charges to bring the machine to the plant. He incurred Rs. 10,000 as installation charges on the same. Pass Journal entries. Also, show your workings clearly.

**Answer:**

#### **Working Notes:**

##### **1) Amount to be paid to the vendor:**

|                 | Rs.             |
|-----------------|-----------------|
| Cost of Machine | 8,00,000        |
| Add: CGST @9%   | 72,000          |
| SGST @9%        | 72,000          |
|                 | <u>9,44,000</u> |

##### **2) Amount debited to Machinery Account:**

|                 | Rs.      |
|-----------------|----------|
| Cost of Machine | 8,00,000 |

|                           |                 |
|---------------------------|-----------------|
| Add: Freight              | 15,000          |
| Loading/Unloading Charges | 20,000          |
| Installation Charges      | 10,000          |
|                           | <u>8,45,000</u> |

| Date          | Particulars  |                   | L.F. | Dr. (Rs.)                    | Cr. (Rs.) |
|---------------|--|-------------------|------|------------------------------|-----------|
| 2018<br>Nov.1 | Machinery A/c<br>Input CGST A/c<br>Input SGST A/c<br>To Cash A/c<br>(Being Machinery Purchased)  | Dr.<br>Dr.<br>Dr. |      | 8,00,000<br>72,000<br>72,000 | 9,44,000  |
|               | Machinery A/c<br>To Cash A/c<br>(Being freight, installation and loading/unloading charges paid) | Dr.               |      | 45,000                       | 45,000    |

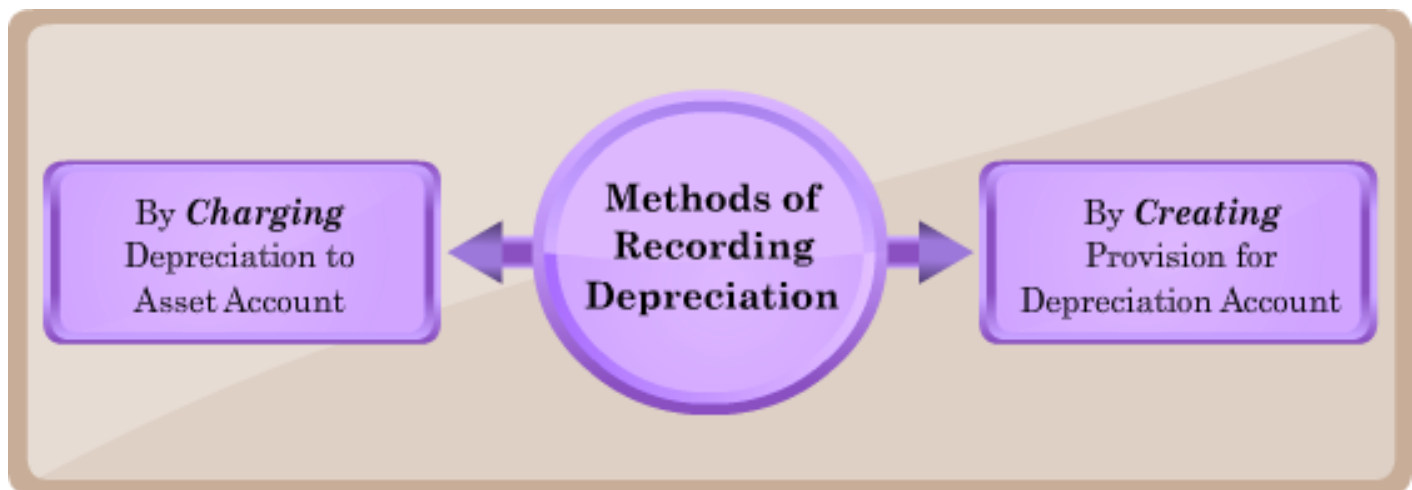
**Note:** Whenever a new machine is purchased any expenses paid until it becomes operational is to be added to the cost of the machine.

### **Recording of Depreciation**

Depreciation, being the loss on the value of fixed asset, is considered as an expense for a business. It should be properly recorded in the books of accounts in order to determine the correct figure of profit or loss. There are two methods for recording depreciation in the books. These are:



1. By Charging Depreciation to Asset Account
2. By Creating Provision for Depreciation Account



1.

### ***By Charging Depreciation to Asset Account***

Under this method, depreciation is directly credited to the asset account. In short, depreciation is straight forwardly charged on the value of the assets. The asset on which the depreciation is charged is shown in the Balance Sheet at its depreciated value. Thus, under this method, the original cost of an asset and the total amount of depreciation cannot be determined from the Balance Sheet, as the Asset appears at its written down value.

The following are the Journal entries recorded under this method.

### **Journal Entries**

| <b><i>JE-1</i></b> | <b><i>On Purchase of Asset</i></b> |     |
|--------------------|------------------------------------|-----|
|                    | Asset A/c                          | Dr. |
|                    | To Cash/Bank A/c                   |     |
|                    | (Asset purchased)                  |     |
|                    |                                    |     |

|             |   |     |
|-------------|---|-----|
| <b>JE-2</b> | <b>For Charging Depreciation on Asset</b>                       |     |
|             | Depreciation A/c  | Dr. |
|             | To Asset A/c  |     |
|             | (Depreciation charged on asset)                                 |     |
|             |   |     |
| <b>JE-3</b> | <b>For transferring Depreciation to Profit and Loss Account</b> |     |
|             | Profit and Loss A/c   | Dr. |
|             | To Depreciation A/c   |     |
|             | (Amount of depreciation transferred to profit and loss account) |     |
|             |   |     |
| <b>JE-4</b> | <b>On Sale of Asset</b>   |     |
|             | Cash/Bank A/c   | Dr. |
|             | To Asset A/c  |     |
|             | (Asset sold)  |     |
|             |   |     |

|             |   |     |
|-------------|---|-----|
|             |   |     |
| <b>JE-5</b> | <b><i>In Case of Profit on Sale</i></b> |     |
|             | Asset A/c                               | Dr. |
|             | To Profit and Loss A/c                  |     |
|             | (Profit on sale of asset)               |     |
|             |   |     |
| <b>JE-6</b> | <b><i>In Case of Loss on Sale</i></b>   |     |
|             | Profit and Loss A/c                     | Dr. |
|             | To Asset A/c                            |     |
|             | (Loss on sale of asset)                 |     |
|             |   |     |

The given below is the format of Asset Account prepared under this method.

|                      |                    |               |             |                    |               |
|----------------------|--------------------|---------------|-------------|--------------------|---------------|
| <b>Asset Account</b> |                    |               |             |                    |               |
| <b>Dr.</b>           |                    |               | <b>Cr.</b>  |                    |               |
| <b>Date</b>          | <b>Particulars</b> | <b>Amount</b> | <b>Date</b> | <b>Particulars</b> | <b>Amount</b> |

|  |  | (Rs) |  |  | (Rs) |
|--|--|------|--|--|------|
|  | Balance b/d (In case opening balance is given)       |      |  | Bank A/c<br>(Sale of Asset- <b>JE-4</b> )                |      |
|  | Bank A/c<br>(Purchase of Asset- <b>JE 1</b> )        |      |  | Profit and Loss A/c<br>(Loss on Sale- <b>JE-6</b> )**    |      |
|  | Profit and Loss A/c (Profit on Sale- <b>JE-5</b> )** |      |  | Depreciation A/c<br>(Depreciation charged- <b>JE-2</b> ) |      |
|  |  |      |  |  |      |
|  |  |      |  | Balance c/d<br>(Closing Balance)                         |      |
|  |  |      |  |  |      |
|  |  |      |  |  |      |
|  |  |      |  |  |      |
|  |  |      |  |  |      |

**\*\*Note- Either Profit or Loss on Sale would appear at one time.**

## **2. By Creating Provision for Depreciation Account**

Under this method, depreciation is not directly credited to the Assets Account. In fact, under this, a separate account, namely, Provision for Depreciation Account is prepared for crediting depreciation. Provision for depreciation is also known as Accumulated Depreciation. As depreciation is not credited to the Asset Account,

so, in this case, asset always appears at its original cost. That is, at the end of the year, asset is shown at its original cost in the Balance Sheet and total depreciation on such asset up to the date of Balance Sheet is shown as Provision for Depreciation Account. This provision can be shown either on the Assets Side as a deduction from the original cost of concerned asset or it can be separately shown on the Liabilities Side of the Balance Sheet. In the normal practice, it is usually shown as a deduction from the original cost of the asset. The following are the Journal entries recorded under this method.

### Journal Entries

|             |  |     |
|-------------|--|-----|
| <b>JE-1</b> | <b><i>On Purchase of Asset</i></b>                                     |     |
|             | Asset A/c  | Dr. |
|             | To Cash/Bank A/c   |     |
|             | (Asset purchased)  |     |
|             |  |     |
| <b>JE-2</b> | <b><i>For Charging Depreciation on Asset</i></b>                       |     |
|             | Depreciation A/c   | Dr. |
|             | To Provision for Depreciation A/c                                      |     |
|             | (Depreciation charged on asset)  |     |
|             |  |     |
| <b>JE-3</b> | <b><i>For Transferring Depreciation to Profit and Loss Account</i></b> |     |

|             |  |     |
|-------------|--|-----|
|             | Profit and Loss A/c  | Dr. |
|             | To Depreciation A/c  |     |
|             | (Amount of depreciation transferred to profit and loss account)  |     |
|             |  |     |
| <b>JE-4</b> | <b><i>On Sale of Asset</i></b>                                   |     |
|             | Cash/Bank A/c  | Dr. |
|             | To Asset A/c   |     |
|             | (Asset sold)   |     |
|             |  |     |
| <b>JE-5</b> | <b><i>For Charging Depreciation on Part of Sale of Asset</i></b> |     |
|             | Provision for Depreciation A/c                                   | Dr. |
|             | To Asset A/c   |     |
|             | (Depreciation on part of asset sold)                             |     |
|             |  |     |
|             |  |     |

|             |   |     |
|-------------|---|-----|
| <b>JE-6</b> | <b><i>In Case of Profit on Sale</i></b> |     |
|             | Asset A/c                               | Dr. |
|             | To Profit and Loss A/c                  |     |
|             | (Profit on sale of asset)               |     |
|             |   |     |
| <b>JE-7</b> | <b><i>In Case of Loss on Sale</i></b>   |     |
|             | Profit and Loss A/c                     | Dr. |
|             | To Asset A/c                            |     |
|             | (Loss on sale of asset)                 |     |
|             |   |     |

The given below is the format of Asset Account and Provision for Depreciation Account prepared under this method.

|                      |                    |               |             |                    |               |
|----------------------|--------------------|---------------|-------------|--------------------|---------------|
| <b>Asset Account</b> |                    |               |             |                    |               |
| <b>Dr.</b>           |                    |               | <b>Cr.</b>  |                    |               |
| <b>Date</b>          | <b>Particulars</b> | <b>Amount</b> | <b>Date</b> | <b>Particulars</b> | <b>Amount</b> |
|                      |                    | <b>(Rs)</b>   |             |                    | <b>(Rs)</b>   |

|  |   |  |  |   |  |
|--|---|--|--|---|--|
|  |   |  |  |   |  |
|  | Balance b/d (In case opening balance is given)          |  |  | Bank A/c<br>(Sale of Asset- <b>JE-4</b> )                                       |  |
|  | Bank A/c<br>(Purchase of Asset- <b>JE 1</b> )           |  |  | Provision for Depreciation A/c<br>(Depreciation on part of asset- <b>JE-5</b> ) |  |
|  | Profit and Loss A/c<br>(Profit on Sale- <b>JE-6</b> )** |  |  | Profit and Loss A/c<br>(Loss on Sale- <b>JE-7</b> )**                           |  |
|  | Balance b/d   |  |  |   |  |
|  |   |  |  | Balance c/d (Closing Balance)   |  |
|  |   |  |  |   |  |
|  |   |  |  |   |  |
|  |   |  |  |   |  |
|  |   |  |  |   |  |

**\*\*Note- Either Profit or Loss on Sale would appear at one time.**

|   |  |  |            |  |  |
|---|--|--|------------|--|--|
| <b>Provision for Depreciation Account</b> |  |  |            |  |  |
| <b>Dr.</b>                                |  |  | <b>Cr.</b> |  |  |
|   |  |  |            |  |  |



| Date | Particulars  | Amount<br>(Rs) | Date | Particulars   | Amount<br>(Rs) |
|------|--|----------------|------|---|----------------|
|      | Asset A/c<br>(Depreciation on part of<br>asset sold- <b>JE-5</b> ) |                |      | Balance b/d (Opening<br>Balance)  |                |
|      | Balance b/d (Closing<br>Balance)                                   |                |      | Depreciation A/c<br>(Depreciation charged<br>during the year- <b>JE-2</b> ) |                |
|      |  |                |      |   |                |
|      |  |                |      |   |                |
|      |  |                |      |   |                |

### Distinction between Provision for Depreciation Account and Depreciation Account

| Basis                       | Provision for Depreciation Account  | Depreciation Account   |
|-----------------------------|---|--|
| <b>1) Nature of Account</b> | It is a permanent valuation account. Since it is prepared throughout the life of the machine. Hence, is shown in the Balance Sheet. | It is a temporary nominal account as one can always close this account by transferring to Profit and Loss Account. Also, one can switch to the Provision for Depreciation Account. |
| <b>2) Effect on</b>         | The asset will appear in the  | The asset will appear in the   |

|  |  |   |
|--|--|---|
| <b>Asset</b>                               | Balance Sheet at its original cost.                      | Balance Sheet at its written down value i.e. reduced value due to depreciation. |
| <b>3) Disclosure in the Final accounts</b> | Appears in the Balance Sheet.                            | Appears in the Profit and Loss Account.   |
| <b>4) Credit Vs. Debit Balance</b>         | It will have a credit balance.                           | It will have a debit balance.   |
| <b>5) Charged Against Asset</b>            | Not charged against asset and is shown at original cost. | Charged against asset.  |

**Example 1:** On January 01, 2011, Tutu Ltd. purchased a machinery for Rs 1,20,000 and spent Rs 30,000 immediately on its installation. Depreciation on asset is provided @ 10% p.a. The firm closes its books on December 31 every year. Pass Journal entries and prepare the necessary ledger accounts for two years if:

Case 1- Provision for Depreciation Account is not prepared

Case 2- Provision for Depreciation Account is prepared

Also show the disclosure of Machinery in the Balance Sheet in each of the above two cases.

### ***Solution***

Cost of asset for the purpose of Depreciation = 1,50,000

Annual Depreciation =  $10\% \times 1,50,000 = \text{Rs } 15,000$

Case 1- *Provision for Depreciation Account is not prepared.*

|   |  |  |  |  |
|---|--|--|--|--|
| <b>Journal</b><br><br><b><i>In the books of Tutu Ltd.</i></b> |  |  |  |  |
|   |  |  |  |  |

| Date       | Particulars   |     | L.F. | Debit<br>(Rs) | Credit<br>(Rs) |
|------------|---|-----|------|---------------|----------------|
| 2011       |   |     |      |               |                |
| Jan.01     | Machinery A/c   | Dr. |      | 1,50,000      |                |
|            | To Bank A/c   |     |      |               | 1,50,000       |
|            | (Machinery purchased)                                 |     |      |               |                |
|            |   |     |      |               |                |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |      | 15,000        |                |
|            | To Machinery A/c                                      |     |      |               | 15,000         |
|            | (Depreciation charged on machinery)                   |     |      |               |                |
|            |   |     |      |               |                |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |      | 15,000        |                |
|            | To Depreciation A/c                                   |     |      |               | 15,000         |
|            | (Depreciation transferred to profit and loss account) |     |      |               |                |
|            |   |     |      |               |                |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
|            |   |     |  |        |        |
| 2012       |   |     |  |        |        |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 15,000 |        |
|            | To Machinery A/c                                      |     |  |        | 15,000 |
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 15,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 15,000 |
|            | (Depreciation transferred to profit and loss account) |     |  |        |        |
|            |   |     |  |        |        |

|                          |                    |               |             |                    |               |
|--------------------------|--------------------|---------------|-------------|--------------------|---------------|
| <b>Machinery Account</b> |                    |               |             |                    |               |
| <b>Dr.</b>               |                    |               | <b>Cr.</b>  |                    |               |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount</b> | <b>Date</b> | <b>Particulars</b> | <b>Amount</b> |

|         |                                 | (Rs)     |         |                  | (Rs)     |
|---------|---------------------------------|----------|---------|------------------|----------|
| 2011    |                                 |          | 2011    |                  |          |
| Jan. 01 | Bank A/c<br>(1,20,000 + 30,000) | 1,50,000 | Dec. 31 | Depreciation A/c | 15,000   |
|         |                                 |          | Dec. 31 | Balance c/d      | 1,35,000 |
|         |                                 | 1,50,000 |         |                  | 1,50,000 |
| 2012    |                                 |          | 2012    |                  |          |
| Jan. 01 | Balance b/d                     | 1,35,000 | Dec. 31 | Depreciation A/c | 15,000   |
|         |                                 |          | Dec. 31 | Balance c/d      | 1,20,000 |
|         |                                 | 1,35,000 |         |                  | 1,35,000 |
|         |                                 |          |         |                  |          |

## Balance Sheet

*as on December 31, 2012*

| Liabilities | Amount | Assets    | Amount   |
|-------------|--------|-----------|----------|
|             |        | Machinery | 1,35,000 |

|  |  |                    |          |          |
|--|--|--------------------|----------|----------|
|  |  | Less: Depreciation | (15,000) | 1,20,000 |
|  |  |                    |          |          |

Case 2- Provision for Depreciation Account is prepared.

| Journal    |                                     |     |      |               |                |
|------------|-------------------------------------|-----|------|---------------|----------------|
| Date       | Particulars                         |     | L.F. | Debit<br>(Rs) | Credit<br>(Rs) |
| 2011       |                                     |     |      |               |                |
| Jan.01     | Machinery A/c                       | Dr. |      | 1,50,000      |                |
|            | To Bank A/c                         |     |      |               | 1,50,000       |
|            | (Machinery purchased)               |     |      |               |                |
|            |                                     |     |      |               |                |
| Dec.<br>31 | Depreciation A/c                    | Dr. |      | 15,000        |                |
|            | To Provision for Depreciation A/c   |     |      |               | 15,000         |
|            | (Depreciation charged on machinery) |     |      |               |                |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 15,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 15,000 |
|            | (Depreciation transferred to profit and loss account) |     |  |        |        |
| 2012       |   |     |  |        |        |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 15,000 |        |
|            | To Provision for Depreciation A/c                     |     |  |        | 15,000 |
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 15,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 15,000 |
|            | (Depreciation transferred to profit and loss account) |     |  |        |        |
|            |   |     |  |        |        |

| Machinery Account |                                 |                |         |             |                |
|-------------------|---------------------------------|----------------|---------|-------------|----------------|
| Dr.               |                                 |                | Cr.     |             |                |
| Date              | Particulars                     | Amount<br>(Rs) | Date    | Particulars | Amount<br>(Rs) |
| 2011              |                                 |                | 2011    |             |                |
| Jan. 01           | Bank A/c<br>(1,20,000 + 30,000) | 1,50,000       | Dec. 31 | Balance c/d | 1,50,000       |
|                   |                                 | 1,50,000       |         |             | 1,50,000       |
| 2012              |                                 |                | 2012    |             |                |
| Jan. 01           | Balance b/d                     | 1,50,000       | Dec. 31 | Balance c/d | 1,50,000       |
|                   |                                 | 1,50,000       |         |             | 1,50,000       |
|                   |                                 |                |         |             |                |

| Provision for Depreciation Account |     |
|------------------------------------|-----|
| Dr.                                | Cr. |



| Date    | Particulars | Amount<br>(Rs) | Date    | Particulars      | Amount<br>(Rs) |
|---------|-------------|----------------|---------|------------------|----------------|
| 2011    |             |                | 2011    |                  |                |
| Dec. 31 | Balance c/d | 15,000         | Dec. 31 | Depreciation A/c | 15,000         |
|         |             | 15,000         |         |                  | 15,000         |
| 2012    |             |                | 2012    |                  |                |
|         |             |                | Jan. 01 | Balance b/d      | 15,000         |
| Dec. 31 | Balance c/d | 30,000         | Dec. 31 | Depreciation A/c | 15,000         |
|         |             | 30,000         |         |                  | 30,000         |
|         |             |                |         |                  |                |

| <b>Balance Sheet</b><br><i>as on December 31, 2012</i> |                |                           |          |                |
|--|----------------|---------------------------|----------|----------------|
| Liabilities  | Amount<br>(Rs) | Assets                    |          | Amount<br>(Rs) |
|  |                | Machinery (Original Cost) | 1,50,000 |                |

|  |  |                                  |          |          |
|--|--|----------------------------------|----------|----------|
|  |  | Less: Provision for Depreciation | (30,000) | 1,20,000 |
|  |  |                                  |          |          |

## Methods of Depreciation

### Objectives

After going through this lesson, you shall be able to understand the following concepts.

- Methods of Depreciation
  - Straight Line Method *versus* Written Down Value Method

### Introduction

In the previous two lessons we have learnt the meaning of depreciation, its causes, requirement, determinants and the methods of recording it in the books of accounts. Now, in this chapter we will get familiarise with the various methods of charging depreciation on fixed assets.

### Methods of Depreciation

There are various methods of calculating depreciation on fixed assets. Once the method for charging depreciation is selected and adopted, then, it should be followed consistently every year. The given below are the various methods for charging depreciation.

1. Straight Line Method
  - ii. Written Down Value Method
  - iii. Depreciation Fund Method
  - iv. Replacement Method
  - v. Annuity Method
  - vi. Insurance Policy Method
  - vii. Machine Hour Rate Method
  - viii. Sum of Years Digit Method
  - ix. Depletion Method
  - x. Revaluation Method

In this chapter, we will learn only first two methods of depreciation. The rest of the methods do not form part of the syllabus for Class-XI.

### Straight Line Method

It is one of the most popular and easy method of charging depreciation on fixed assets. Under this method, depreciation is charged on the original cost of the asset every year, at a fixed rate of percentage. Therefore, in this case, *amount of depreciation remains the same for each of the year*. This method of depreciation is also known as Original Cost Method or Equal /Fixed Instalment Method. Under this method, the amount to be written-off each year as depreciation is calculated by dividing the cost of the asset by its estimated useful life. It should be noted that scrap value of the asset is to be deducted from the original cost before calculating depreciation. The given below is the formula for calculating depreciation under this method.

*For example*, the cost of machinery purchased is Rs 4,70,000 and installation cost is Rs 30,000. The scrap value at the end of its estimated life of 10 years is expected to be Rs 50,000. In this case, the amount to be written-off each year as depreciation is calculated as follows-

### **Calculation of Rate of Depreciation under Straight Line Method**

Rate of depreciation under this method is calculated with the help of given below formula-

Taking the above given example, the rate of depreciation in that case would be-

### **Advantages of Straight Line Method**

The given below are the various advantages of Straight Line Method of depreciation.

1. It is a simple and easy method of calculating depreciation.
2. Under this method, asset can be completely written-off. That is, asset can be depreciated to its net scrap value or zero value.
3. As under this method, same or equal amount of depreciation is charged from the Profit and Loss Account each year, so, the burden of depreciation on the net profit remains the same.
4. It is suitable for those assets that have low repairs and maintenance costs and are used continuously in the business over a period of time.

### **Disadvantages of Straight Line Method**

The disadvantages of Straight Line Method of depreciation are given below.

1. When the assets have been in use for a long time, it demands frequent repairs and maintenance. Thus, with the passage of time, the burden of depreciation on profit and loss account increases along with the repairs and maintenance costs of the asset.
2. Under this method, value of the asset becomes zero in the books even if the asset is still in the usable condition by the business.

3. The estimation of scrap value of the asset after a long period of say, 10 or 15 years, is a difficult task.
4. This method is not suitable for all kinds of fixed assets.

### **Written Down Value Method**

This is another method of charging depreciation on the fixed assets. Under this method, depreciation is not charged on the original cost of the asset. It is charged at a fixed rate on the diminished or reduced value of the asset, i.e. the cost after deducting previously charged depreciation. As a result of this, with the decline in the value of asset year after year, the amount of depreciation also decreases from one year to another. This method of charging depreciation is also known as Diminishing Balance Method or Reducing Instalment Method.

*For example,* cost of machinery purchased is Rs 2,00,000 and rate of depreciation is 10% p.a. In this case, depreciation for the first year would be Rs 20,000 (i.e.  $2,00,000 \times 10\%$ ).

For the second year, depreciation will be computed on the written down value of Rs 1,80,000 (i.e.  $2,00,000 - 20,000$ ). So, the amount of depreciation for the second year would be Rs 18,000 (i.e.  $1,80,000 \times 10\%$ ). In the similar manner, depreciation for the subsequent years can be computed by considering the written down value of machinery.

### **Calculation of Rate of Depreciation under Written Down Value Method**

Rate of depreciation under this method is calculated with the help of formula given below -

*Where,*

R represents Rate of Depreciation

n represents Estimated Useful Life of the Asset

S represents Estimated Scrap Value

C represents Cost of the Asset

*For example,* the cost of machinery purchased is Rs 6,40,000. The scrap value at the end of its estimated life of 5 years is expected to be Rs 20,000. The rate of depreciation is calculated as-

### **Advantages of Written Down Value Method**

The following are the advantages of written down value method of depreciation.

1. It is based on the logical assumption that asset is used more in the earlier years, so, more cost is charged in earlier years in the form of depreciation.
2. It is suitable for those assets that have high repairs and maintenance costs.
3. This method is accepted by the income tax authorities.

4. As more depreciation is charged in the earlier years, so the loss of the asset due to obsolescence of technology is reduced.

### ***Disadvantages of Written Down Value Method***

The given below are the disadvantages of written down value method of depreciation.

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

### **Distinction between Straight Line Method and Written Down Value Method**

The given below are the various points of difference between the two methods of charging depreciation.

| <b>Point of Distinction</b> | <b>Straight Line Method</b>   | <b>Written Down Value Method</b>   |
|-----------------------------|---|--|
| Basis of Calculation        | Calculated on the original cost of the asset.   | Calculated on the written down value of the asset.   |
| Amount of Depreciation      | Remains the same throughout the effective life of the asset.  | Reduces each year throughout the effective life of the asset.  |
| Book Value of Asset         | Book value becomes zero at the end of the effective life of the asset.  | Book value of the asset can never become zero.   |
| Suitability                 | Suitable for the assets which have lesser possibility of obsolescence and have lesser repair charges such as, Patents, Copyrights, Land and Buildings, etc. | It is suitable for assets that needs more repairs and maintenance costs and have higher possibility of obsolescence in the later years such as, Plant and Machinery, Car, etc. |
| Rate of Depreciation        | Simple to calculate.  | Difficult to calculate.  |
|                             |   |  |

|                                    |  |  |
|------------------------------------|--|--|
| Effect of Depreciation and Repairs | The combined cost on account of repairs and depreciation is lower in initial years and higher in later years. In other words, it has <i>Unequal effect on Profit and Loss Account</i> over the life of the asset, as depreciation remains same for each year but repair cost increases in the later years. | The combined cost of two is more or less equal throughout the period. It means it has <i>Equal effect on Profit and Loss Account</i> over the life of the asset, as depreciation is high and repairs are less in the initial years but in the later years the repair cost increases and depreciation cost decreases. |
| Recognition under Income Tax Act   | It is not recognised under the Income Tax Act.   | It is recognised under the Income Tax Act.   |

### ***Important Points to be noted***

- **When rate of depreciation is given with the word 'per annum'**

| <b><i>Date of Purchase</i></b>   |  |
|--|--|
| <b>Given</b>   | <b>Not Given</b>   |
| Depreciation is charged for the period for which the asset is used in the business. That is, for the period from date of purchase till the end of the accounting period. | Depreciation is charged for the whole year on the assumption that asset is purchased in the beginning of the year. |

| <b><i>Date of Sale</i></b>   |   |
|--|---|
| <b>Given</b>   | <b>Not Given</b>  |
| Depreciation is charged for the period for which the asset is used in the business. That is, for the period from the beginning of the accounting period till the date of sale. | Depreciation is <i>not</i> charged on the assumption that asset is sold in the beginning of the year. |

**Note 1-** *In case the date of purchase is given and the question clearly mentions that depreciation is to be charged for the full year, then depreciation is to be charged for the full year without considering the time factor.*

**Note 2-** *Similarly, in case the date of sale is given and the question clearly mentions that depreciation is to be ignored, then depreciation is not charged on the asset so sold.*

- **When rate of depreciation is *given without the word 'per annum'***

In case the rate of depreciation is given without the word '*per annum*', then depreciation is charged without considering the time factor. That is, depreciation on asset is charged for the full year irrespective of the date of purchase.

## **Straight Line Method**

### **Objective**

After going through this lesson, you shall be able to understand the Straight Line Method of charging depreciation in detail.

### **Straight Line Method**

In the previous lesson, we learnt that it is one of the methods of charging depreciation on fixed assets. We also know that under this method, depreciation is charged on the original cost of the asset. The given below are some of the examples which will help in understanding and gaining the thorough knowledge of this method.

**Example 1:** On April 01, 2010, Megha Ltd. acquired a machinery costing Rs 1,65,000 on which carriage and erection charges were Rs 17,000 and Rs 28,000 respectively. The machinery was expected to realise Rs 35,000 at the end of its useful life of 7 years. Pass the necessary Journal entries in the books of Megha Ltd. for three years ending on March 31, 2013. Also, prepare Machinery Account and Depreciation on Machinery Account for three years.

### ***Solution***

| Journal |             |      |                         |                          |
|---------|-------------|------|-------------------------|--------------------------|
| Date    | Particulars | L.F. | Debit<br>Amount<br>(Rs) | Credit<br>Amount<br>(Rs) |
|         |             |      |                         |                          |

|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
| 2010       |   |     |  |          |          |
| Apr.<br>01 | Machinery A/c (1,65,000 + 17,000 + 28,000)            | Dr. |  | 2,10,000 |          |
|            | To Bank A/c   |     |  |          | 2,10,000 |
|            | (Machinery purchased)                                 |     |  |          |          |
| 2011       |   |     |  |          |          |
| Mar.<br>31 | Depreciation A/c ( <b>WN1</b> )                       | Dr. |  | 25,000   |          |
|            | To Machinery A/c                                      |     |  |          | 25,000   |
|            | (Depreciation charged on machinery)                   |     |  |          |          |
|            |   |     |  |          |          |
| Mar.<br>31 | Profit and Loss A/c                                   | Dr. |  | 25,000   |          |
|            | To Depreciation A/c                                   |     |  |          | 25,000   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |
|            |   |     |  |          |          |



|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
| 2012       |   |     |  |        |        |
| Mar.<br>31 | Depreciation A/c                                      | Dr. |  | 25,000 |        |
|            | To Machinery A/c                                      |     |  |        | 25,000 |
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |
| Mar.<br>31 | Profit and Loss A/c                                   | Dr. |  | 25,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 25,000 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |
|            |   |     |  |        |        |
| 2013       |   |     |  |        |        |
| Mar.<br>31 | Depreciation A/c                                      | Dr. |  | 25,000 |        |
|            | To Machinery A/c                                      |     |  |        | 25,000 |
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
|            |   |     |  |        |        |
| Mar.<br>31 | Profit and Loss A/c                                   | Dr. |  | 25,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 25,000 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |
|            |   |     |  |        |        |

| Machinery Account |             |                |         |                  |                |
|-------------------|-------------|----------------|---------|------------------|----------------|
| Dr.               |             |                | Cr.     |                  |                |
| Date              | Particulars | Amount<br>(Rs) | Date    | Particulars      | Amount<br>(Rs) |
| 2010              |             |                | 2011    |                  |                |
| Apr. 01           | Bank A/c    | 2,10,000       | Mar. 31 | Depreciation A/c | 25,000         |
|                   |             |                | Mar. 31 | Balance c/d      | 1,85,000       |
|                   |             | 2,10,000       |         |                  | 2,10,000       |
| 2011              |             |                | 2012    |                  |                |

|         |             |          |         |                  |          |
|---------|-------------|----------|---------|------------------|----------|
| Apr. 01 | Balance b/d | 1,85,000 | Mar. 31 | Depreciation A/c | 25,000   |
|         |             |          | Mar. 31 | Balance c/d      | 1,60,000 |
|         |             | 1,85,000 |         |                  | 1,85,000 |
| 2012    |             |          | 2013    |                  |          |
| Apr. 01 | Balance b/d | 1,60,000 | Mar. 31 | Depreciation A/c | 25,000   |
|         |             |          | Mar. 31 | Balance c/d      | 1,35,000 |
|         |             | 1,60,000 |         |                  | 1,60,000 |
|         |             |          |         |                  |          |

| Depreciation on Machinery Account |               |                |         |                     |                |
|-----------------------------------|---------------|----------------|---------|---------------------|----------------|
| Dr.                               |               |                | Cr.     |                     |                |
| Date                              | Particulars   | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
| 2011                              |               |                | 2011    |                     |                |
| Mar. 31                           | Machinery A/c | 25,000         | Mar. 31 | Profit and Loss A/c | 25,000         |

|         |               |        |         |                     |        |
|---------|---------------|--------|---------|---------------------|--------|
|         |               | 25,000 |         |                     | 25,000 |
| 2012    |               |        | 2012    |                     |        |
| Mar. 31 | Machinery A/c | 25,000 | Mar. 31 | Profit and Loss A/c | 25,000 |
|         |               | 25,000 |         |                     | 25,000 |
| 2013    |               |        | 2013    |                     |        |
| Mar. 31 | Machinery A/c | 25,000 | Mar. 31 | Profit and Loss A/c | 25,000 |
|         |               | 25,000 |         |                     | 25,000 |
|         |               |        |         |                     |        |

**Working Note:**

**WN1- Calculation of Depreciation**

**Example 2:** Furniture costing Rs 2,40,000 was purchased on January 01, 2009 and Rs 25,000 was paid for its cartage. Depreciation is charged at 12% p.a. by Straight Line Method. Assuming the books are closed on December 31 each year, prepare Furniture Account and Depreciation for four years.

**Solution**

|                          |  |  |            |  |  |
|--------------------------|--|--|------------|--|--|
| <b>Furniture Account</b> |  |  |            |  |  |
| <b>Dr.</b>               |  |  | <b>Cr.</b> |  |  |
|                          |  |  |            |  |  |

| Date       | Particulars                        | Amount<br>(Rs) | Date       | Particulars                          | Amount<br>(Rs) |
|------------|------------------------------------|----------------|------------|--------------------------------------|----------------|
| 2009       |                                    |                | 2009       |                                      |                |
| Jan.<br>01 | Bank A/c<br>(2,40,000 +<br>25,000) | 2,65,000       | Dec.<br>31 | Depreciation A/c<br>(2,65,000 × 12%) | 31,800         |
|            |                                    |                | Dec.<br>31 | Balance c/d                          | 2,33,200       |
|            |                                    | 2,65,000       |            |                                      | 2,65,000       |
| 2010       |                                    |                | 2010       |                                      |                |
| Jan.<br>01 | Balance b/d                        | 2,33,200       | Dec.<br>31 | Depreciation A/c<br>(2,65,000 × 12%) | 31,800         |
|            |                                    |                | Dec.<br>31 | Balance c/d                          | 2,01,400       |
|            |                                    | 2,33,200       |            |                                      | 2,33,200       |
| 2011       |                                    |                | 2011       |                                      |                |
| Jan.<br>01 | Balance b/d                        | 2,01,400       | Dec.<br>31 | Depreciation A/c<br>(2,65,000 × 12%) | 31,800         |
|            |                                    |                | Dec.<br>31 | Balance c/d                          | 1,69,600       |

|            |             |          |            |                                      |          |
|------------|-------------|----------|------------|--------------------------------------|----------|
|            |             | 2,01,400 |            |                                      | 2,01,400 |
| 2012       |             |          | 2012       |                                      |          |
| Jan.<br>01 | Balance b/d | 1,69,600 | Dec.<br>31 | Depreciation A/c (2,65,000<br>× 12%) | 31,800   |
|            |             |          | Dec.<br>31 | Balance c/d                          | 1,37,800 |
|            |             | 1,69,600 |            |                                      | 1,69,600 |
|            |             |          |            |                                      |          |
|            |             |          |            |                                      |          |

| Depreciation Account |               |                |         |                     |                |
|----------------------|---------------|----------------|---------|---------------------|----------------|
| Dr.                  |               |                | Cr.     |                     |                |
| Date                 | Particulars   | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
| 2009                 |               |                | 2009    |                     |                |
| Dec. 31              | Furniture A/c | 31,800         | Dec. 31 | Profit and Loss A/c | 31,800         |
|                      |               |                |         |                     |                |

|         |               |        |         |                     |        |
|---------|---------------|--------|---------|---------------------|--------|
|         |               | 31,800 |         |                     | 31,800 |
| 2010    |               |        | 2010    |                     |        |
| Dec. 31 | Furniture A/c | 31,800 | Dec. 31 | Profit and Loss A/c | 31,800 |
|         |               | 31,800 |         |                     | 31,800 |
| 2011    |               |        | 2011    |                     |        |
| Dec. 31 | Furniture A/c | 31,800 | Dec. 31 | Profit and Loss A/c | 31,800 |
|         |               | 31,800 |         |                     | 31,800 |
| 2012    |               |        | 2012    |                     |        |
| Dec. 31 | Furniture A/c | 31,800 | Dec. 31 | Profit and Loss A/c | 31,800 |
|         |               | 31,800 |         |                     | 31,800 |
|         |               |        |         |                     |        |

**Example 3:** On January 01, 2010, a plant costing Rs 68,000 was purchased and Rs 12,000 was spent on its installation. It was expected to realise Rs 15,000 at the end of its effective life of 13 years. On April 01, 2011, another plant costing Rs 95,000 was acquired and Rs 8,000 was spent for its freight. The estimated life of this plant was 9 years at the end of which it is expected to realise Rs 13,000. On July 01, 2012, a new plant was purchased for Rs 50,000 the residual value of which after effective life of 10 years will be Rs 5,000. Prepare a Machinery Account from 2010 to 2012 on the assumption that accounts are closed on December 31 each year.

**Solution**

| Plant Account |                                       |                |            |                       |                |        |
|---------------|---------------------------------------|----------------|------------|-----------------------|----------------|--------|
| Dr.           |                                       |                |            | Cr.                   |                |        |
| Date          | Particulars                           | Amount<br>(Rs) | Date       | Particulars           | Amount<br>(Rs) |        |
| 2010          |                                       |                | 2010       |                       |                |        |
| Jan.<br>01    | Bank A/c (P1)<br>(68,000 +<br>12,000) | 80,000         | Dec.<br>31 | Depreciation A/c (P1) | 5,000          |        |
|               |                                       |                | Dec.<br>31 | Balance c/d           | 75,000         |        |
|               |                                       | 80,000         |            |                       | 80,000         |        |
| 2011          |                                       |                | 2011       |                       |                |        |
| Jan.<br>01    | Balance b/d                           | 75,000         | Dec.<br>31 | Depreciation A/c      |                |        |
| Apr.<br>01    | Bank A/c (P2)<br>(95,000 +<br>8,000)  | 1,03,000       |            | P1                    | 5,000          |        |
|               |                                       |                |            | P2 (for 9<br>months)  | 7,500          | 12,500 |



|            |               |          |            |                            |        |          |
|------------|---------------|----------|------------|----------------------------|--------|----------|
|            |               |          | Dec.<br>31 | Balance c/d                |        |          |
|            |               |          |            | P1                         | 70,000 |          |
|            |               |          |            | P2                         | 95,500 | 1,65,500 |
|            |               | 1,78,000 |            |                            |        | 1,78,000 |
| 2012       |               |          | 2012       |                            |        |          |
| Jan.<br>01 | Balance b/d   |          | Dec.<br>31 | Depreciation A/c           |        |          |
|            | P1            | 70,000   |            | P1                         | 5,000  |          |
|            | P2            | 95,500   | 1,65,500   | P2                         | 10,000 |          |
| Jul. 01    | Bank A/c (P3) |          | 50,000     | P3 ( <i>for 6 months</i> ) | 2,250  | 17,250   |
|            |               |          | Dec.<br>31 | Balance c/d                |        |          |
|            |               |          |            | P1                         | 65,000 |          |
|            |               |          |            | P2                         | 85,500 |          |
|            |               |          |            | P3                         | 47,750 | 1,98,250 |

|  |  |          |  |  |          |
|--|--|----------|--|--|----------|
|  |  | 2,15,500 |  |  | 2,15,500 |
|  |  |          |  |  |          |

**Working Notes:** Calculation of Depreciation on Plant

**Example 4:** On January 01, 2010, a machinery was purchased for Rs 4,00,000. Another second hand machinery costing Rs 1,25,000 was purchased on April 01, 2011 and Rs 25,000 was paid for its installation. Depreciation is charged @ 5% p.a. on the original cost basis.

Prepare Machinery Account for three years, assuming that books are closed on December 31 each year.

**Solution**

| <b>Machinery Account</b> |                    |                        |             |                       |                        |
|--------------------------|--------------------|------------------------|-------------|-----------------------|------------------------|
| <b>Dr.</b>               |                    |                        | <b>Cr.</b>  |                       |                        |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b>    | <b>Amount<br/>(Rs)</b> |
| 2010                     |                    |                        | 2010        |                       |                        |
| Jan.<br>01               | Bank A/c<br>(M1)   | 4,00,000               | Dec.<br>31  | Depreciation A/c (M1) | 20,000                 |
|                          |                    |                        | Dec.<br>31  | Balance c/d           | 3,80,000               |
|                          |                    | 4,00,000               |             |                       | 4,00,000               |
|                          |                    |                        |             |                       |                        |

|            |                  |          |            |                            |          |          |
|------------|------------------|----------|------------|----------------------------|----------|----------|
| 2011       |                  |          | 2011       |                            |          |          |
| Jan.<br>01 | Balance b/d      | 3,80,000 | Dec.<br>31 | Depreciation A/c           |          |          |
| Apr.<br>01 | Bank A/c<br>(M2) | 1,50,000 |            | M1                         | 20,000   |          |
|            |                  |          |            | M2 ( <i>for 9 months</i> ) | 5,625    | 25,625   |
|            |                  |          | Dec.<br>31 | Balance c/d                |          |          |
|            |                  |          |            | M1                         | 3,60,000 |          |
|            |                  |          |            | M2                         | 1,44,375 | 5,04,375 |
|            |                  | 5,30,000 |            |                            |          | 5,30,000 |
| 2012       |                  |          | 2012       |                            |          |          |
| Jan.<br>01 | Balance b/d      |          | Dec.<br>31 | Depreciation A/c           |          |          |
|            | M1               | 3,60,000 |            | M1                         | 20,000   |          |
|            | M2               | 1,44,375 | 5,04,375   | M2                         | 7,500    | 27,500   |
|            |                  |          | Dec.<br>31 | Balance c/d                |          |          |

|  |  |          |  |    |          |          |
|--|--|----------|--|----|----------|----------|
|  |  |          |  | M1 | 3,40,000 |          |
|  |  |          |  | M2 | 1,36,875 | 4,76,875 |
|  |  |          |  |    |          |          |
|  |  | 5,04,375 |  |    |          | 5,04,375 |
|  |  |          |  |    |          |          |

**Working Notes: Calculation of Depreciation**

**Example 5:** Max Ltd. bought a truck for Rs 4,50,000 on July 01, 2010. During the year 2012, on October 01, the truck was sold for Rs 2,15,000. Depreciation is charged at 20% p.a. on original cost basis. Prepare Truck Account and Depreciation Account assuming the books are closed on December 31 every year. Also pass the necessary Journal entries.

**Solution**

| Journal    |             |     |      |                         |                          |
|------------|-------------|-----|------|-------------------------|--------------------------|
| Date       | Particulars |     | L.F. | Debit<br>Amount<br>(Rs) | Credit<br>Amount<br>(Rs) |
| 2010       |             |     |      |                         |                          |
| Jul.<br>01 | Truck A/c   | Dr. |      | 4,50,000                |                          |

|            |   |     |  |        |          |
|------------|---|-----|--|--------|----------|
|            | To Bank A/c   |     |  |        | 4,50,000 |
|            | (Truck purchased)                                     |     |  |        |          |
|            |   |     |  |        |          |
| Dec.<br>31 | Depreciation A/c ( <b>WN1</b> )                       | Dr. |  | 45,000 |          |
|            | To Truck A/c  |     |  |        | 45,000   |
|            | (Depreciation charged for 6 months)                   |     |  |        |          |
|            |   |     |  |        |          |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 45,000 |          |
|            | To Depreciation A/c                                   |     |  |        | 45,000   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |          |
|            |   |     |  |        |          |
| 2011       |   |     |  |        |          |
| Dec.<br>31 | Depreciation A/c ( <b>WN1</b> )                       | Dr. |  | 90,000 |          |
|            |   |     |  |        |          |

|            |   |     |  |          |        |
|------------|---|-----|--|----------|--------|
|            | To Truck A/c  |     |  |          | 90,000 |
|            | (Depreciation charged on truck)                       |     |  |          |        |
|            |   |     |  |          |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 90,000   |        |
|            | To Depreciation A/c                                   |     |  |          | 90,000 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |        |
|            |   |     |  |          |        |
| 2012       |   |     |  |          |        |
| Oct.<br>01 | Depreciation A/c                                      | Dr. |  | 67,500   |        |
|            | To Truck A/c  |     |  |          | 67,500 |
|            | (Depreciation charged for 9 months)                   |     |  |          |        |
|            |   |     |  |          |        |
| Oct.<br>01 | Bank A/c  | Dr. |  | 2,15,000 |        |
|            |   |     |  |          |        |

|            |   |     |  |        |          |
|------------|---|-----|--|--------|----------|
|            | To Truck A/c  |     |  |        | 2,15,000 |
|            | (Truck sold)  |     |  |        |          |
|            |   |     |  |        |          |
| Oct.<br>01 | Profit and Loss A/c ( <b>WN2</b> )                    | Dr. |  | 32,500 |          |
|            | To Truck A/c  |     |  |        | 32,500   |
|            | (Loss on sale of truck)                               |     |  |        |          |
|            |   |     |  |        |          |
| Dec.<br>31 | Profit and Loss A/c ( <b>WN1</b> )                    | Dr. |  | 67,500 |          |
|            | To Depreciation A/c                                   |     |  |        | 67,500   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |          |
|            |   |     |  |        |          |

|                      |            |
|----------------------|------------|
| <b>Truck Account</b> |            |
| <b>Dr.</b>           | <b>Cr.</b> |

| Date    | Particulars | Amount<br>(Rs) | Date    | Particulars                              | Amount<br>(Rs) |
|---------|-------------|----------------|---------|--|----------------|
| 2010    |             |                | 2010    |  |                |
| Jul. 01 | Bank A/c    | 4,50,000       | Dec. 31 | Depreciation A/c ( <i>for 6 months</i> ) | 45,000         |
|         |             |                | Dec. 31 | Balance c/d                              | 4,05,000       |
|         |             | 4,50,000       |         |  | 4,50,000       |
| 2011    |             |                | 2011    |  |                |
| Jan. 01 | Balance b/d | 4,05,000       | Dec. 31 | Depreciation A/c                         | 90,000         |
|         |             |                | Dec. 31 | Balance c/d                              | 3,15,000       |
|         |             | 4,05,000       |         |  | 4,05,000       |
| 2012    |             |                | 2012    |  |                |
| Jan. 01 | Balance b/d | 3,15,000       | Oct. 01 | Depreciation A/c ( <i>for 9 months</i> ) | 67,500         |
|         |             |                | Oct. 01 | Bank A/c ( <i>sale of truck</i> )        | 2,15,000       |



|  |  |          |            |   |          |
|--|--|----------|------------|---|----------|
|  |  |          | Oct.<br>01 | Profit and Loss A/c ( <i>Loss on sale</i> ) | 32,500   |
|  |  | 3,15,000 |            |   | 3,15,000 |
|  |  |          |            |   |          |

| Depreciation Account |             |                |         |                     |                |
|----------------------|-------------|----------------|---------|---------------------|----------------|
| Dr.                  |             |                | Cr.     |                     |                |
| Date                 | Particulars | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
| 2010                 |             |                | 2010    |                     |                |
| Dec. 31              | Truck A/c   | 45,000         | Dec. 31 | Profit and Loss A/c | 45,000         |
|                      |             | 45,000         |         |                     | 45,000         |
| 2011                 |             |                | 2011    |                     |                |
| Dec. 31              | Truck A/c   | 90,000         | Dec. 31 | Profit and Loss A/c | 90,000         |
|                      |             | 90,000         |         |                     | 90,000         |
|                      |             |                |         |                     |                |

|         |           |        |         |                     |        |
|---------|-----------|--------|---------|---------------------|--------|
| 2012    |           |        | 2012    |                     |        |
| Dec. 31 | Truck A/c | 67,500 | Dec. 31 | Profit and Loss A/c | 67,500 |
|         |           | 67,500 |         |                     | 67,500 |
|         |           |        |         |                     |        |

**Working Notes:**

**WN1-** *Calculation of Depreciation*

**WN2-** *Calculation of Profit or Loss on Sale*

| <b>Particulars</b>                 | <b>Amount</b> |
|------------------------------------|---------------|
| Value of Truck as on Jan. 01, 2012 | 3,15,000      |
| Less: Depreciation for 9 months    | (67,500)      |
| Value of Truck as on Oct. 01, 2012 | 2,47,500      |
| Less: Sale Value                   | (2,15,000)    |
| <b>Loss on Sale</b>                | <b>32,500</b> |
|                                    |               |

**Example 6:** On January 01, 2010, a machinery was purchased for Rs 9,00,000. During the same year, on May 31, 2010, an additional second-hand machinery

was also purchased for Rs 6,30,000. On September 01, 2012, second-hand machinery purchased on May 31 goes out of order and sold for Rs 4,20,000. On the same date, a new machinery was acquired for Rs 3,50,000. Depreciation charged at 15% p.a. on Equal Instalment Method.

Record the necessary Journal entries in the books and also prepare the Machinery Account. The books are closed on 31<sup>st</sup> December every year.

### ***Solution***

| <b>Journal</b> |                       |     |             |                                  |                                   |
|----------------|-----------------------|-----|-------------|----------------------------------|-----------------------------------|
| <b>Date</b>    | <b>Particulars</b>    |     | <b>L.F.</b> | <b>Debit<br/>Amount<br/>(Rs)</b> | <b>Credit<br/>Amount<br/>(Rs)</b> |
| 2010           |                       |     |             |                                  |                                   |
| Jan.<br>01     | Machinery A/c         | Dr. |             | 9,00,000                         |                                   |
|                | To Bank A/c           |     |             |                                  | 9,00,000                          |
|                | (Machinery purchased) |     |             |                                  |                                   |
|                |                       |     |             |                                  |                                   |
| May<br>31      | Machinery A/c         | Dr. |             | 6,30,000                         |                                   |
|                | To Bank A/c           |     |             |                                  | 6,30,000                          |

|         |   |     |  |          |          |
|---------|---|-----|--|----------|----------|
|         | (Another second-hand machinery purchased)             |     |  |          |          |
|         |   |     |  |          |          |
| Dec. 31 | Depreciation A/c                                      | Dr. |  | 1,90,125 |          |
|         | To Machinery A/c                                      |     |  |          | 1,90,125 |
|         | (Depreciation charged on machinery)                   |     |  |          |          |
|         |   |     |  |          |          |
| Dec. 31 | Profit and Loss A/c                                   | Dr. |  | 1,90,125 |          |
|         | To Depreciation A/c                                   |     |  |          | 1,90,125 |
|         | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|         |   |     |  |          |          |
| 2011    |   |     |  |          |          |
| Dec. 31 | Depreciation A/c                                      | Dr. |  | 2,29,500 |          |
|         | To Machinery A/c                                      |     |  |          | 2,29,500 |

|             |   |     |  |          |          |
|-------------|---|-----|--|----------|----------|
|             | (Depreciation charged on machinery)                   |     |  |          |          |
|             |   |     |  |          |          |
| Dec.<br>31  | Profit and Loss A/c                                   | Dr. |  | 2,29,500 |          |
|             | To Depreciation A/c                                   |     |  |          | 2,29,500 |
|             | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|             |   |     |  |          |          |
| 2012        |   |     |  |          |          |
| Sept.<br>01 | Depreciation A/c                                      | Dr. |  | 63,000   |          |
|             | To Machinery A/c                                      |     |  |          | 63,000   |
|             | (Depreciation charged on machinery sold)              |     |  |          |          |
|             |   |     |  |          |          |
| Sept.<br>01 | Bank A/c  | Dr. |  | 4,20,000 |          |
|             | To Machinery A/c                                      |     |  |          | 4,20,000 |
|             |   |     |  |          |          |

|             |                                     |     |  |          |          |
|-------------|-------------------------------------|-----|--|----------|----------|
|             | (Machinery sold)                    |     |  |          |          |
|             |                                     |     |  |          |          |
| Sept.<br>01 | Machinery A/c                       | Dr. |  | 2,625    |          |
|             | To Profit and Loss A/c              |     |  |          | 2,625    |
|             | (Profit on sale of machinery)       |     |  |          |          |
|             |                                     |     |  |          |          |
| Sept.<br>01 | Machinery A/c                       | Dr. |  | 3,50,000 |          |
|             | To Bank A/c                         |     |  |          | 3,50,000 |
|             | (Purchase of new machinery)         |     |  |          |          |
|             |                                     |     |  |          |          |
| Dec.<br>31  | Depreciation A/c                    | Dr. |  | 1,52,500 |          |
|             | To Machinery A/c                    |     |  |          | 1,52,500 |
|             | (Depreciation charged on machinery) |     |  |          |          |
|             |                                     |     |  |          |          |

|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
| Dec.<br>31 | Profit and Loss A/c (63,000 + 1,52,500)               | Dr. |  | 2,15,500 |          |
|            | To Depreciation A/c                                   |     |  |          | 2,15,500 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |

| Machinery Account |               |                |            |                   |                |          |
|-------------------|---------------|----------------|------------|-------------------|----------------|----------|
| Dr.               |               |                | Cr.        |                   |                |          |
| Date              | Particulars   | Amount<br>(Rs) | Date       | Particulars       | Amount<br>(Rs) |          |
| 2010              |               |                | 2010       |                   |                |          |
| Jan.<br>01        | Bank A/c (M1) | 9,00,000       | Dec.<br>31 | Depreciation on-  |                |          |
| May<br>31         | Bank A/c (M2) | 6,30,000       |            | M1                | 1,35,000       |          |
|                   |               |                |            | M2 (for 7 months) | 55,125         | 1,90,125 |
|                   |               |                |            |                   |                |          |

|            |             |           |            |                         |          |           |
|------------|-------------|-----------|------------|-------------------------|----------|-----------|
|            |             |           | Dec.<br>31 | Balance c/d             |          |           |
|            |             |           |            | M1                      | 7,65,000 |           |
|            |             |           |            | M2                      | 5,74,875 | 13,39,875 |
|            |             | 15,30,000 |            |                         |          | 15,30,000 |
| 2011       |             |           | 2011       |                         |          |           |
| Jan.<br>01 | Balance b/d |           | Dec.<br>31 | Depreciation on-        |          |           |
|            | M1          | 7,65,000  |            | M1                      | 1,35,000 |           |
|            | M2          | 5,74,875  | 13,39,875  | M2                      | 94,500   | 2,29,500  |
|            |             |           | Dec.<br>31 | Balance c/d             |          |           |
|            |             |           |            | M1                      | 6,30,000 |           |
|            |             |           |            | M2                      | 4,80,375 | 11,10,375 |
|            |             | 13,39,875 |            |                         |          | 13,39,875 |
| 2012       |             |           | 2012       |                         |          |           |
| Jan.       | Balance b/d |           | Sep.       | Depreciation A/c (On M2 |          | 63,000    |



|             |  |          |                  |            |                                |          |                  |
|-------------|--|----------|------------------|------------|--------------------------------|----------|------------------|
| 01          |  |          |                  | 01         | for 8 months)                  |          |                  |
|             | M1                                       | 6,30,000 |                  | Sep.<br>01 | Bank A/c ( <i>Sale of M2</i> ) |          | 4,20,000         |
|             | M2                                       | 4,80,375 | 11,10,375        | Dec.<br>31 | Depreciation on                |          |                  |
| Sept.<br>01 | Profit and Loss<br>A/c ( <i>Profit</i> ) |          | 2,625            |            | M1                             | 1,35,000 |                  |
| Sept.<br>01 | Bank A/c (M3)                            |          | 3,50,000         |            | M3 ( <i>for 4<br/>months</i> ) | 17,500   | 1,52,500         |
|             |  |          |                  | Dec.<br>31 | Balance c/d                    |          |                  |
|             |  |          |                  |            | M1 (6,30,000<br>– 1,35,000)    | 4,95,000 |                  |
|             |  |          |                  |            | M3 (3,50,000<br>– 17,500)      | 3,32,500 | 8,27,500         |
|             |  |          |                  |            |                                |          |                  |
|             |  |          | <b>14,63,000</b> |            |                                |          | <b>14,63,000</b> |
|             |  |          |                  |            |                                |          |                  |

**Working Notes:** Calculation of Profit or Loss on Sale

|  |  |
|--|--|
|  |  |
|--|--|

| Particulars                      | Amount<br>(Rs) |
|----------------------------------|----------------|
| Value of M2 as on Jan. 01, 2012  | 4,80,375       |
| Less: Depreciation for 8 months  | (63,000)       |
| Value of M2 as on Sept. 01, 2012 | 4,17,375       |
| Less: Sale Value                 | (4,20,000)     |
| <b>Profit on Sale</b>            | <b>2,625</b>   |
|                                  |                |

**Example 7:** Hema Ltd. purchased furniture for Rs. 3, 00,000 plus CGST and SGST @ 6% each on 1st April, 2016. Additional furniture was purchased for Rs. 50,000 plus IGST @ 12% by cheque on 1st October, 2017. Depreciation is charged @ 15% p.a. by the Straight Line Method. Accounts are closed on 31st March every year. Pass necessary journal entries for the years ended 31st March, 2017, 2018 and 2019 and show Machinery Account and Machinery in the Balance Sheet.

**Answer:**

**In the Books of Hema Ltd.**

**Journal**

| Date   | Particulars    |     | L.F. | Dr.(Rs.) | Cr.(Rs.) |
|--------|----------------|-----|------|----------|----------|
| 2016   |                |     |      |          |          |
| Apr. 1 | Furniture A/c  | Dr. |      | 3,00,000 |          |
|        | Input CGST A/c |     |      | 18,000   |          |

|                 |   |     |  |                 |          |
|-----------------|---|-----|--|-----------------|----------|
|                 | Input SGST A/c<br>To Cash/ Bank A/c<br>(Being furniture purchased plus CGST and SGST paid)            |     |  | 18,000          | 3,36,000 |
| 2017<br>Mar. 31 | Depreciation A/c<br>To Furniture A/c<br>(Being depreciation charged on Furniture)                     | Dr. |  | 45,000          | 45,000   |
| Mar.31          | Profit & Loss A/c<br>To Depreciation A/c<br>(Being depreciation transferred to Profit & Loss Account) | Dr. |  | 45,000          | 45,000   |
| 2017<br>Oct.1   | Furniture A/c<br>Input IGST A/c<br>To Bank A/c<br>(Being inter-state purchase of furniture)           | Dr. |  | 50,000<br>6,000 | 56,000   |
| 2018<br>Mar.31  | Depreciation A/c<br>To Furniture A/c  | Dr. |  | 48,750          | 48,750   |

|                |   |     |  |        |        |
|----------------|---|-----|--|--------|--------|
|                | (Being depreciation charged on Furniture)   |     |  |        |        |
| Mar.31         | Profit & Loss A/c<br>To Depreciation A/c<br>(Being depreciation transferred to Profit & Loss Account) | Dr. |  | 48,750 | 48,750 |
| 2019<br>Mar.31 | Depreciation A/c<br>To Furniture A/c<br>(Being depreciation charged on Furniture)                     | Dr. |  | 52,500 | 52,500 |
| Mar.31         | Profit & Loss A/c<br>To Depreciation A/c<br>(Being depreciation transferred to Profit & Loss Account) | Dr. |  | 52,500 | 52,500 |

**Note:** GST paid is not added to the cost of furniture since it is to be set off against GST collected

| Dr.            |             | Furniture A/c |          |                |             | Cr.  |        |
|----------------|-------------|---------------|----------|----------------|-------------|------|--------|
| Date           | Particulars | J.F.          | Rs.      | Date           | Particulars | J.F. | Rs.    |
| 2016<br>Apr. 1 |             |               | 3,00,000 | 2017<br>Mar.31 |             |      | 45,000 |

|           |                      |  |                 |        |                           |  |                 |
|-----------|----------------------|--|-----------------|--------|---------------------------|--|-----------------|
|           | To Cash/<br>Bank A/c |  |                 |        | By<br>Depreciation<br>A/c |  |                 |
|           |                      |  |                 | Mar.31 | By Balance c/d            |  | 2,55,000        |
|           |                      |  | <u>3,00,000</u> |        |                           |  | <u>3,00,000</u> |
| 2017      |                      |  |                 | 2018   | By<br>Depreciation<br>A/c |  |                 |
| Apr. 1    | To Balance<br>b/d    |  | 2,55,000        | Mar.31 | By Balance c/d            |  | 48,750          |
| Oct.<br>1 | To Bank A/c          |  | 50,000          | Mar.31 | Furniture 1<br>2,10,000   |  | 2,56,250        |
|           |                      |  |                 |        | Furniture 2<br>46,250     |  |                 |
|           |                      |  | <u>3,05,000</u> |        |                           |  | <u>3,05,000</u> |
| 2018      |                      |  |                 | 2019   |                           |  |                 |
| Apr. 1    | To balance<br>b/d    |  | 2,56,250        | Mar.31 | By<br>Depreciation<br>A/c |  | 52,500          |
|           |                      |  |                 | Mar.31 | Furniture 1<br>45,000     |  | 2,03,750        |
|           |                      |  |                 |        | Furniture 2<br>7,500      |  |                 |
|           |                      |  |                 |        | By Balance c/d            |  |                 |

|  |  |  |                 |  |                         |  |                 |
|--|--|--|-----------------|--|-------------------------|--|-----------------|
|  |  |  |                 |  | Furniture 1<br>1,65,000 |  |                 |
|  |  |  |                 |  | Furniture 2<br>38,750   |  |                 |
|  |  |  | <u>2,56,250</u> |  |                         |  | <u>2,56,250</u> |
|  |  |  |                 |  |                         |  |                 |

| Dr.            |                     | Depreciation A/c |               |                |                         | Cr.  |               |
|----------------|---------------------|------------------|---------------|----------------|-------------------------|------|---------------|
| Date           | Particulars         | J.F.             | Rs.           | Date           | Particulars             | J.F. | Rs.           |
| 2017<br>Mar.31 | To Furniture<br>A/c |                  | 45,000        | 2017<br>Mar.31 | By Profit &<br>Loss A/c |      | 45,000        |
|                |                     |                  |               |                |                         |      |               |
|                |                     |                  | <u>45,000</u> |                |                         |      | <u>45,000</u> |
| 2018<br>Mar.31 | To Furniture<br>A/c |                  | 48,750        | 2018<br>Mar.31 | By Profit &<br>Loss A/c |      | 48,750        |
|                |                     |                  |               |                |                         |      |               |
|                |                     |                  | <u>48,750</u> |                |                         |      | <u>48,750</u> |
| 2019           |                     |                  |               | 2019           |                         |      |               |

|        |                  |  |               |        |                      |  |               |
|--------|------------------|--|---------------|--------|----------------------|--|---------------|
| Mar.31 | To Furniture A/c |  | 52,500        | Mar.31 | By Profit & Loss A/c |  | 52,500        |
|        |                  |  | <u>52,500</u> |        |                      |  | <u>52,500</u> |
|        |                  |  |               |        |                      |  |               |

## Written Down Value Method

### Objective

After going through this lesson, you shall be able to understand the Written Down Value Method of charging depreciation.

### Written Down Value Method

As against the Straight Line Method, under this method, depreciation is charged on the book value or diminished value of the asset. The given below are some examples which will help you to understand this method of depreciation in a better way.

**Example 1:** On January 01, 2009 a machinery was acquired for Rs 11,00,000 on which erection and freight was paid Rs 23,000 and Rs 27,000 respectively. The estimated scrap value at the end of its effective life was expected to be Rs 32,000. Depreciation is provided at 10% p.a. on Written Down Value Method. Pass the necessary Journal entries in the books and also show Machinery Account and Depreciation Account for four years. The books are closed on December 31 each year.

### Solution

| Journal |             |      |              |               |
|---------|-------------|------|--------------|---------------|
| Date    | Particulars | L.F. | Debit Amount | Credit Amount |
|         |             |      |              |               |

|            |   |     |  | (Rs)      | (Rs)      |
|------------|---|-----|--|-----------|-----------|
| 2009       |   |     |  |           |           |
| Jan.<br>01 | Machinery A/c (11,00,000 + 23,000 + 27,000)           | Dr. |  | 11,50,000 |           |
|            | To Bank A/c   |     |  |           | 11,50,000 |
|            | (Machinery purchased)                                 |     |  |           |           |
|            |   |     |  |           |           |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 1,15,000  |           |
|            | To Machinery A/c                                      |     |  |           | 1,15,000  |
|            | (Depreciation charged on machinery)                   |     |  |           |           |
|            |   |     |  |           |           |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 1,15,000  |           |
|            | To Depreciation A/c                                   |     |  |           | 1,15,000  |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |           |           |
|            |   |     |  |           |           |



|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
|            |   |     |  |          |          |
| 2010       |   |     |  |          |          |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 1,03,500 |          |
|            | To Machinery A/c                                      |     |  |          | 1,03,500 |
|            | (Depreciation charged on machinery)                   |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 1,03,500 |          |
|            | To Depreciation A/c                                   |     |  |          | 1,03,500 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |
| 2011       |   |     |  |          |          |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 93,150   |          |
|            | To Machinery A/c                                      |     |  |          | 93,150   |
|            |   |     |  |          |          |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 93,150 |        |
|            | To Depreciation A/c                                   |     |  |        | 93,150 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |
| 2012       |   |     |  |        |        |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 83,835 |        |
|            | To Machinery A/c                                      |     |  |        | 83,835 |
|            | (Depreciation charged on machinery)                   |     |  |        |        |
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 83,835 |        |
|            | To Depreciation A/c                                   |     |  |        | 83,835 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

| Machinery Account |             |                |            |                                       |                |
|-------------------|-------------|----------------|------------|---------------------------------------|----------------|
| Dr.               |             |                | Cr.        |                                       |                |
| Date              | Particulars | Amount<br>(Rs) | Date       | Particulars                           | Amount<br>(Rs) |
| 2009              |             |                | 2009       |                                       |                |
| Jan.<br>01        | Bank A/c    | 11,50,000      | Dec.<br>31 | Depreciation A/c (11,50,000<br>× 10%) | 1,15,000       |
|                   |             |                | Dec.<br>31 | Balance c/d                           | 10,35,000      |
|                   |             | 11,50,000      |            |                                       | 11,50,000      |
| 2010              |             |                | 2010       |                                       |                |
| Jan.<br>01        | Balance b/d | 10,35,000      | Dec.<br>31 | Depreciation A/c (10,35,000<br>× 10%) | 1,03,500       |
|                   |             |                | Dec.<br>31 | Balance c/d                           | 9,31,500       |
|                   |             | 10,35,000      |            |                                       | 10,35,000      |

|            |             |          |            |                                      |          |
|------------|-------------|----------|------------|--------------------------------------|----------|
| 2011       |             |          | 2011       |                                      |          |
| Jan.<br>01 | Balance b/d | 9,31,500 | Dec.<br>31 | Depreciation A/c (9,31,500<br>× 10%) | 93,150   |
|            |             |          | Dec.<br>31 | Balance c/d                          | 8,38,350 |
|            |             | 9,31,500 |            |                                      | 9,31,500 |
| 2012       |             |          | 2012       |                                      |          |
| Jan.<br>01 | Balance b/d | 8,38,350 | Dec.<br>31 | Depreciation A/c (8,38,350<br>× 10%) | 83,835   |
|            |             |          | Dec.<br>31 | Balance c/d                          | 7,54,515 |
|            |             | 8,38,350 |            |                                      | 8,38,350 |
|            |             |          |            |                                      |          |
|            |             |          |            |                                      |          |

|                             |  |  |            |  |  |
|-----------------------------|--|--|------------|--|--|
| <b>Depreciation Account</b> |  |  |            |  |  |
| <b>Dr.</b>                  |  |  | <b>Cr.</b> |  |  |
|                             |  |  |            |  |  |

| Date    | Particulars   | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
|---------|---------------|----------------|---------|---------------------|----------------|
| 2009    |               |                | 2009    |                     |                |
| Dec. 31 | Machinery A/c | 1,15,000       | Dec. 31 | Profit and Loss A/c | 1,15,000       |
|         |               | 1,15,000       |         |                     | 1,15,000       |
| 2010    |               |                | 2010    |                     |                |
| Dec. 31 | Machinery A/c | 1,03,500       | Dec. 31 | Profit and Loss A/c | 1,03,500       |
|         |               | 1,03,500       |         |                     | 1,03,500       |
| 2011    |               |                | 2011    |                     |                |
| Dec. 31 | Machinery A/c | 93,150         | Dec. 31 | Profit and Loss A/c | 93,150         |
|         |               | 93,150         |         |                     | 93,150         |
| 2012    |               |                | 2012    |                     |                |
| Dec. 31 | Machinery A/c | 83,835         | Dec. 31 | Profit and Loss A/c | 83,835         |
|         |               | 83,835         |         |                     | 83,835         |
|         |               |                |         |                     |                |

**Example 2:** On January 01, 2010, the furniture account of Hemraj Ltd. showed a balance of Rs 2,70,000. In the same year, on July 01, 2010, additional furniture worth Rs 1,20,000 was purchased. On April 01, 2011 new furniture costing Rs 1,60,000 was purchased. Depreciation is provided at 15% p.a. on the Diminishing Balance Method. Prepare furniture account upto December 31, 2012, assuming that books are closed on December 31 each year.

**Solution**

| Furniture Account |                  |                |            |                   |                |          |
|-------------------|------------------|----------------|------------|-------------------|----------------|----------|
| Dr.               |                  |                | Cr.        |                   |                |          |
| Date              | Particulars      | Amount<br>(Rs) | Date       | Particulars       | Amount<br>(Rs) |          |
| 2010              |                  |                | 2010       |                   |                |          |
| Jan.<br>01        | Balance b/d (F1) | 2,70,000       | Dec.<br>31 | Depreciation A/c  |                |          |
| Jul.<br>01        | Bank A/c (F2)    | 1,20,000       |            | F1                | 40,500         |          |
|                   |                  |                |            | F2 (for 6 months) | 9,000          | 49,500   |
|                   |                  |                | Dec.<br>31 | Balance c/d       |                |          |
|                   |                  |                |            | F1                | 2,29,500       |          |
|                   |                  |                |            | F2                | 1,11,000       | 3,40,500 |

|            |               |          |            |                            |          |          |
|------------|---------------|----------|------------|----------------------------|----------|----------|
|            |               | 3,90,000 |            |                            |          | 3,90,000 |
| 2011       |               |          | 2011       |                            |          |          |
| Jan.<br>01 | Balance b/d   |          | Dec.<br>31 | Depreciation A/c           |          |          |
|            | F1            | 2,29,500 |            | F1 (2,29,500 × 15%)        | 34,425   |          |
|            | F2            | 1,11,000 | 3,40,500   | F2 (1,11,000 × 15%)        | 16,650   |          |
| Apr.<br>01 | Bank A/c (F3) |          | 1,60,000   | F3 ( <i>for 9 months</i> ) | 18,000   | 69,075   |
|            |               |          | Dec.<br>31 | Balance c/d                |          |          |
|            |               |          |            | F1                         | 1,95,075 |          |
|            |               |          |            | F2                         | 94,350   |          |
|            |               |          |            | F3                         | 1,42,000 | 4,31,425 |
|            |               | 5,00,500 |            |                            |          | 5,00,500 |
| 2012       |               |          | 2012       |                            |          |          |
| Jan.       | Balance b/d   |          | Dec.       | Depreciation A/c           |          |          |

|    |    |          |          |            |                     |          |
|----|----|----------|----------|------------|---------------------|----------|
| 01 |    |          | 31       |            |                     |          |
|    | F1 | 1,95,075 |          |            | F1 (1,95,075 × 15%) | 29,261   |
|    | F2 | 94,350   |          |            | F2 (94,350 × 15%)   | 14,153   |
|    | F3 | 1,42,000 | 4,31,425 |            | F3 (1,42,000 × 15%) | 21,300   |
|    |    |          |          |            |                     | 64,714   |
|    |    |          |          | Dec.<br>31 | Balance c/d         |          |
|    |    |          |          |            | F1                  | 1,65,814 |
|    |    |          |          |            | F2                  | 80,197   |
|    |    |          |          |            | F3                  | 1,20,700 |
|    |    |          |          |            |                     | 3,66,711 |
|    |    |          |          |            |                     |          |
|    |    |          | 4,31,425 |            |                     | 4,31,425 |
|    |    |          |          |            |                     |          |

**Example 3:** Shiny Ltd. acquired a machinery for Rs 2,00,000 on May 01, 2010. During the year 2012, the machinery was sold for Rs 1,06,000 on August 31. Depreciation is charged at 8% p.a. Prepare Machinery Account and Depreciation Account assuming the books are closed on December 31 every year.



**Solution**

| <b>Machinery Account</b> |                    |                        |             |  |                        |
|--------------------------|--------------------|------------------------|-------------|--|------------------------|
| <b>Dr.</b>               |                    |                        | <b>Cr.</b>  |  |                        |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b>                         | <b>Amount<br/>(Rs)</b> |
| 2010                     |                    |                        | 2010        |  |                        |
| May<br>01                | Bank A/c           | 2,00,000               | Dec.<br>31  | Depreciation A/c ( <i>for 8 months</i> )   | 10,667                 |
|                          |                    |                        | Dec.<br>31  | Balance c/d                                | 1,89,333               |
|                          |                    | 2,00,000               |             |  | 2,00,000               |
| 2011                     |                    |                        | 2011        |  |                        |
| Jan.<br>01               | Balance b/d        | 1,89,333               | Dec.<br>31  | Depreciation A/c ( $1,89,333 \times 8\%$ ) | 15,147                 |
|                          |                    |                        | Dec.<br>31  | Balance c/d                                | 1,74,186               |
|                          |                    | 1,89,333               |             |  | 1,89,333               |
|                          |                    |                        |             |  |                        |

|         |             |          |         |   |          |
|---------|-------------|----------|---------|---|----------|
| 2012    |             |          | 2012    |   |          |
| Jan. 01 | Balance b/d | 1,74,186 | Aug. 31 | Depreciation A/c ( <i>for 8 months</i> )    | 9,290    |
|         |             |          | Aug. 31 | Bank A/c ( <i>Sale of Machine</i> )         | 1,06,000 |
|         |             |          | Aug. 31 | Profit and Loss A/c ( <i>Loss on Sale</i> ) | 58,896   |
|         |             | 1,74,186 |         |   | 1,74,186 |
|         |             |          |         |   |          |

| Depreciation Account |               |             |         |                     |             |
|----------------------|---------------|-------------|---------|---------------------|-------------|
| Dr.                  |               |             | Cr.     |                     |             |
| Date                 | Particulars   | Amount (Rs) | Date    | Particulars         | Amount (Rs) |
| 2010                 |               |             | 2010    |                     |             |
| Dec. 31              | Machinery A/c | 10,667      | Dec. 31 | Profit and Loss A/c | 10,667      |
|                      |               | 10,667      |         |                     | 10,667      |
|                      |               |             |         |                     |             |

|         |               |        |         |                     |        |
|---------|---------------|--------|---------|---------------------|--------|
| 2011    |               |        | 2011    |                     |        |
| Dec. 31 | Machinery A/c | 15,147 | Dec. 31 | Profit and Loss A/c | 15,147 |
|         |               | 15,147 |         |                     | 15,147 |
| 2012    |               |        | 2012    |                     |        |
| Dec. 31 | Machinery A/c | 9,290  | Dec. 31 | Profit and Loss A/c | 9,290  |
|         |               | 9,290  |         |                     | 9,290  |
|         |               |        |         |                     |        |

**Working Notes:** *Calculation of Profit or Loss on Sale*

| Particulars                            | Amount        |
|--|---------------|
| Value of Machinery as on Jan. 01, 2012 | 1,74,186      |
| Less: Depreciation for 8 months        | (9,290)       |
| Value of Machinery as on Aug. 01, 2012 | 1,64,896      |
| Less: Sale Value                       | (1,06,000)    |
| <b>Loss on Sale</b>                    | <b>58,896</b> |
|  |               |

**Example 4:** On January 01, 2010, a machinery was purchased for Rs 4,72,000 and Rs 28,000 was paid for its carriage and installation. Another machinery costing Rs 3,60,000 was acquired on June 01, 2011. On March 01, 2012, machinery purchased on January 01, 2010 was sold for Rs 3,88,700. On the same date, new machinery costing Rs 2,50,000 was purchased and installed. Depreciation is charged at 10% p.a. on Written Down Value Method. Record the necessary Journal entries in the books and also prepare machinery account and depreciation. The books are closed on December 31 every year.

**Solution**

| Journal    |                                   |     |      |                         |                          |
|------------|-----------------------------------|-----|------|-------------------------|--------------------------|
| Date       | Particulars                       |     | L.F. | Debit<br>Amount<br>(Rs) | Credit<br>Amount<br>(Rs) |
| 2010       |                                   |     |      |                         |                          |
| Jan.<br>01 | Machinery A/c (4,72,000 + 28,000) | Dr. |      | 5,00,000                |                          |
|            | To Bank A/c                       |     |      |                         | 5,00,000                 |
|            | (Machinery purchased)             |     |      |                         |                          |
|            |                                   |     |      |                         |                          |
| Dec.<br>31 | Depreciation A/c                  | Dr. |      | 50,000                  |                          |

|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
|            | To Machinery A/c                                      |     |  |          | 50,000   |
|            | (Depreciation charged on machinery)                   |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 50,000   |          |
|            | To Depreciation A/c                                   |     |  |          | 50,000   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |
| 2011       |   |     |  |          |          |
| June<br>01 | Machinery A/c   | Dr. |  | 3,60,000 |          |
|            | To Bank A/c   |     |  |          | 3,60,000 |
|            | (Machinery purchased)                                 |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Depreciation A/c (45,000 + 21,000)                    | Dr. |  | 66,000   |          |

|            |   |     |  |          |        |
|------------|---|-----|--|----------|--------|
|            | To Machinery A/c                                      |     |  | 66,000   |        |
|            | (Depreciation charged on machinery)                   |     |  |          |        |
|            |   |     |  |          |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 66,000   |        |
|            | To Depreciation A/c                                   |     |  |          | 66,000 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |        |
|            |   |     |  |          |        |
| 2012       |   |     |  |          |        |
| Mar.<br>01 | Depreciation A/c                                      | Dr. |  | 6,750    |        |
|            | To Machinery A/c                                      |     |  |          | 6,750  |
|            | (Depreciation charged on machinery sold)              |     |  |          |        |
|            |   |     |  |          |        |
| Mar.<br>01 | Bank A/c  | Dr. |  | 3,88,700 |        |
|            |   |     |  |          |        |

|            |                                     |     |  |          |          |
|------------|-------------------------------------|-----|--|----------|----------|
|            | To Machinery A/c                    |     |  |          | 3,88,700 |
|            | (Machinery sold)                    |     |  |          |          |
|            |                                     |     |  |          |          |
| Mar.<br>01 | Profit and Loss A/c                 | Dr. |  | 9,550    |          |
|            | To Machinery A/c                    |     |  |          | 9,550    |
|            | (Loss on sale of machinery)         |     |  |          |          |
|            |                                     |     |  |          |          |
| Mar.<br>01 | Machinery A/c                       | Dr. |  | 2,50,000 |          |
|            | To Bank A/c                         |     |  |          | 2,50,000 |
|            | (Purchase of new machinery)         |     |  |          |          |
|            |                                     |     |  |          |          |
| Dec.<br>31 | Depreciation A/c                    | Dr. |  | 54,733   |          |
|            | To Machinery A/c                    |     |  |          | 54,733   |
|            | (Depreciation charged on machinery) |     |  |          |          |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c (54,733 + 6,750)                  | Dr. |  | 61,483 |        |
|            | To Depreciation A/c                                   |     |  |        | 61,483 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |
|            |   |     |  |        |        |

| Machinery Account |               |                |            |                       |                |
|-------------------|---------------|----------------|------------|-----------------------|----------------|
| Dr.               |               |                | Cr.        |                       |                |
| Date              | Particulars   | Amount<br>(Rs) | Date       | Particulars           | Amount<br>(Rs) |
| 2010              |               |                | 2010       |                       |                |
| Jan.<br>01        | Bank A/c (M1) | 5,00,000       | Dec.<br>31 | Depreciation A/c (M1) | 50,000         |
|                   |               |                | Dec.<br>31 | Balance c/d           | 4,50,000       |
|                   |               |                |            |                       |                |



|         |               |          |         |  |          |
|---------|---------------|----------|---------|--|----------|
|         |               | 5,00,000 |         |  | 5,00,000 |
| 2011    |               |          | 2011    |  |          |
| Jan. 01 | Balance b/d   | 4,50,000 | Dec. 31 | Depreciation A/c                               |          |
| Jun. 01 | Bank A/c (M2) | 3,60,000 |         | M1   | 45,000   |
|         |               |          |         | M2 ( <i>for 7 months</i> )                     | 21,000   |
|         |               |          | Dec. 31 | Balance c/d                                    | 66,000   |
|         |               |          |         | M1   | 4,05,000 |
|         |               |          |         | M2   | 3,39,000 |
|         |               | 8,10,000 |         |  | 7,44,000 |
|         |               |          |         |  | 8,10,000 |
| 2012    |               |          | 2012    |  |          |
| Jan. 01 | Balance b/d   |          | Mar. 01 | Depreciation A/c ( <i>on M1 for 2 months</i> ) | 6,750    |
|         | M1            | 4,05,000 |         | Bank A/c ( <i>Sale of M1</i> )                 | 3,88,700 |
|         | M2            | 3,39,000 |         | Profit and Loss A/c ( <i>Loss on Sale</i> )    | 9,550    |
|         |               | 7,44,000 |         |  |          |

|            |                  |          |            |                  |          |
|------------|------------------|----------|------------|------------------|----------|
| Mar.<br>01 | Bank A/c<br>(M3) | 2,50,000 | Dec.31     | Depreciation on- |          |
|            |                  |          |            |                  |          |
|            |                  |          |            | M2               | 33,900   |
|            |                  |          |            | M3               | 20,833   |
|            |                  |          |            |                  | 54,733   |
|            |                  |          | Dec.<br>31 | Balance c/d      |          |
|            |                  |          |            | M2               | 3,05,100 |
|            |                  |          |            | M3               | 2,29,167 |
|            |                  |          |            |                  | 5,34,267 |
|            |                  | 9,94,000 |            |                  | 9,94,000 |
|            |                  |          |            |                  |          |

| Depreciation Account |             |                |      |             |                |
|----------------------|-------------|----------------|------|-------------|----------------|
| Dr.                  |             |                | Cr.  |             |                |
| Date                 | Particulars | Amount<br>(Rs) | Date | Particulars | Amount<br>(Rs) |
| 2010                 |             |                | 2010 |             |                |
|                      |             |                |      |             |                |

|         |               |        |         |                     |        |
|---------|---------------|--------|---------|---------------------|--------|
| Dec. 31 | Machinery A/c | 50,000 | Dec. 31 | Profit and Loss A/c | 50,000 |
|         |               | 50,000 |         |                     | 50,000 |
| 2011    |               |        | 2011    |                     |        |
| Dec. 31 | Machinery A/c | 66,000 | Dec. 31 | Profit and Loss A/c | 66,000 |
|         |               | 66,000 |         |                     | 66,000 |
| 2012    |               |        | 2012    |                     |        |
| Dec. 31 | Machinery A/c | 61,483 | Dec. 31 | Profit and Loss A/c | 61,483 |
|         |               | 61,483 |         |                     | 61,483 |
|         |               |        |         |                     |        |

**Working Notes:** Calculation of Profit or Loss on Sale

| Particulars                      | Amount     |
|----------------------------------|------------|
| Value of M1 as on Jan. 01, 2012  | 4,05,000   |
| Less: Depreciation for 2 months  | (6,750)    |
| Value of M1 as on Marc. 01, 2012 | 3,98,250   |
| Less: Sale Value                 | (3,88,700) |

|                     |              |
|---------------------|--------------|
| <b>Loss on Sale</b> | <b>9,550</b> |
|                     |              |

**Example 5:** On 1st July, 2016 Krystal Ltd. purchased machinery for Rs. 6, 00,000. On 1st October, 2018, this machinery was destroyed and Rs. 2, 50,000 was received by a cheque from the Insurance Company in full settlement on 1st January, 2019. On 1st October, 2018 additional machinery was purchased for Rs. 4, 00,000 plus IGST @12%. The company charges depreciation @10% per annum. Prepare Machinery Account from 2016 to 2019 when books are closed on 31st March every year.

**Answer:**

| Dr.            |                      | Machinery A/c |                 |                |   |      | Cr.             |
|----------------|----------------------|---------------|-----------------|----------------|---|------|-----------------|
| Date           | Particulars          | J.F.          | Rs.             | Date           | Particulars                                 | J.F. | Rs.             |
| 2016<br>Jul.1  | To Cash/<br>Bank A/c |               | 6,00,000        | 2017<br>Mar.31 | By<br>Depreciation<br>A/c (for 9<br>months) |      | 45,000          |
|                |                      |               |                 | Mar.31         | By Balance c/d                              |      | 5,55,000        |
|                |                      |               | <u>6,00,000</u> |                |   |      | <u>6,00,000</u> |
| 2017<br>Apr. 1 | To Balance<br>b/d    |               | 5,55,000        | 2018<br>Mar.31 | By<br>Depreciation                          |      | 55,500          |

|        |                |  |                 |        |                                |  |                 |
|--------|----------------|--|-----------------|--------|--------------------------------|--|-----------------|
|        |                |  |                 | Mar.31 | A/c                            |  | 4,99,500        |
|        |                |  |                 |        | By Balance c/d                 |  |                 |
|        |                |  | <u>5,55,000</u> |        |                                |  | <u>5,55,000</u> |
| 2018   |                |  |                 | 2019   | By Bank A/c                    |  |                 |
| Apr. 1 | To balance b/d |  | 4,99,500        | Jan.1  | By Loss on sale of Machine A/c |  | 2,50,000        |
| Oct.1  | To Bank A/c    |  | 4,00,000        | Jan.1  |                                |  | 2,24,525        |
|        |                |  |                 | Mar.31 | By Depreciation A/c            |  | 44,975          |
|        |                |  |                 | Mar.31 | By Balance c/d                 |  | 3,80,000        |
|        |                |  | <u>8,99,500</u> |        |                                |  | <u>8,99,500</u> |
|        |                |  |                 |        |                                |  |                 |

| Dr.            |                  | Depreciation A/c |        |                |                      |      | Cr.    |
|----------------|------------------|------------------|--------|----------------|----------------------|------|--------|
| Date           | Particulars      | J.F.             | Rs.    | Date           | Particulars          | J.F. | Rs.    |
| 2017<br>Mar.31 | To Machinery A/c |                  | 45,000 | 2017<br>Mar.31 | By Profit & Loss A/c |      | 45,000 |
|                |                  |                  |        |                |                      |      |        |

|                |                     |  |               |                |                         |  |               |
|----------------|---------------------|--|---------------|----------------|-------------------------|--|---------------|
|                |                     |  |               |                |                         |  |               |
|                |                     |  | <u>45,000</u> |                |                         |  | <u>45,000</u> |
| 2018<br>Mar.31 | To Machinery<br>A/c |  | 55,500        | 2018<br>Mar.31 | By Profit &<br>Loss A/c |  | 55,500        |
|                |                     |  | <u>55,500</u> |                |                         |  | <u>55,500</u> |
| 2019<br>Mar.31 | To Machinery<br>A/c |  | 44,975        | 2019<br>Mar.31 | By Profit &<br>Loss A/c |  | 44,975        |
|                |                     |  | <u>44,975</u> |                |                         |  | <u>44,975</u> |
|                |                     |  |               |                |                         |  |               |

## Working Notes:

### 1) Calculation of Depreciation

|  |        |
|--|--------|
|  | Rs.    |
| a) 10% of Rs.4,99,500 for 6 months<br>(4,99,500 x 10/100 x 6/12) | 24,975 |

|   |               |
|---|---------------|
| b) 10% of Rs.4,00,000 for 6 months<br>(4,00,00 x 10/100 x 6/12) | 20,000        |
| <b>Total Depreciation</b>                                       | <u>44,975</u> |

## 2) Calculation of Loss on Machinery due to Fire

|   | Rs.                |
|---|--------------------|
| a) Original Cost                              | 6,00,000           |
| Less: Depreciation (45,000 + 55,500 + 24,975) | 1,25,475           |
| Book Value on the accident date               | <u>4,74,525</u>    |
| b) Insurance Claim                            | 2,50,000           |
| Less: Book Value on the accident date         | 4,74,525           |
| <b>Loss on Machinery destroyed</b>            | <u>(2,24,525).</u> |

**Note:** Whenever a new machine is purchased any expenses paid until it becomes operational is to be added to the cost of the machine. Hence, not included in the Rs. 4,00,000 machinery cost.

## **Asset Account with Provision for Depreciation Account**

### **Objective**

After going through this lesson, you shall be able to understand the preparation of Asset Account along with Provision for Depreciation Account.

### **Introduction**

In the previous lessons, we have already learnt that depreciation can be recorded in the books either by directly charging it to the Assets Account or by preparing a separate account i.e. Provision for Depreciation Account. When depreciation is directly charged to the assets, then depreciation so charged is shown in the Assets Account itself. This method we have already learnt in the previous lessons. Now in this lesson, we will learn how to prepare Assets Account when depreciation is recorded in a separate account i.e. in the Provision for Depreciation Account.

The given below are some examples which will help in getting the better hold over this concept.

**Example 1:** On January 01, 2010, furniture costing Rs 3,00,000 was purchased. On July, 01, 2011 additional furniture costing Rs 1,70,000 was purchased and Rs 10,000 was paid for its carriage. Depreciation was charged @ 5% p.a. on Straight Line Method.

Prepare necessary ledger accounts for the period from 2010 to 2012, if Provision for Depreciation Account is maintained for recording depreciation. Also pass the necessary Journal entries. Assume that books are closed on December 31 each year.

### **Solution**

| <b>Journal</b> |                    |             |                       |                        |
|----------------|--------------------|-------------|-----------------------|------------------------|
| <b>Date</b>    | <b>Particulars</b> | <b>L.F.</b> | <b>Debit<br/>(Rs)</b> | <b>Credit<br/>(Rs)</b> |



|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
| 2010       |   |     |  |          |          |
| Jan.<br>01 | Furniture A/c   | Dr. |  | 3,00,000 |          |
|            | To Bank A/c   |     |  |          | 3,00,000 |
|            | (Furniture purchased)                                 |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 15,000   |          |
|            | To Provision for Depreciation A/c                     |     |  |          | 15,000   |
|            | (Depreciation charged on furniture)                   |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 15,000   |          |
|            | To Depreciation A/c                                   |     |  |          | 15,000   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |

|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
| 2011       |   |     |  |          |          |
| Jul.<br>01 | Furniture A/c (1,70,000 + 10,000)                     | Dr. |  | 1,80,000 |          |
|            | To Bank A/c   |     |  |          | 1,80,000 |
|            | (Furniture purchased)                                 |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 19,500   |          |
|            | To Provision for Depreciation A/c                     |     |  |          | 19,500   |
|            | (Depreciation charged on furniture)                   |     |  |          |          |
|            |   |     |  |          |          |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 19,500   |          |
|            | To Depreciation A/c                                   |     |  |          | 19,500   |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |
|            |   |     |  |          |          |

|            |   |     |  |        |        |
|------------|---|-----|--|--------|--------|
| 2012       |   |     |  |        |        |
| Dec.<br>31 | Depreciation A/c                                      | Dr. |  | 24,000 |        |
|            | To Provision for Depreciation A/c                     |     |  |        | 24,000 |
|            | (Depreciation charged on furniture)                   |     |  |        |        |
|            |   |     |  |        |        |
| Dec.<br>31 | Profit and Loss A/c                                   | Dr. |  | 24,000 |        |
|            | To Depreciation A/c                                   |     |  |        | 24,000 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |        |        |
|            |   |     |  |        |        |

| Furniture Account |             |                |      |             |                |
|-------------------|-------------|----------------|------|-------------|----------------|
| Dr.               |             |                | Cr.  |             |                |
| Date              | Particulars | Amount<br>(Rs) | Date | Particulars | Amount<br>(Rs) |
|                   |             |                |      |             |                |

|         |               |          |         |             |          |
|---------|---------------|----------|---------|-------------|----------|
| 2010    |               |          | 2010    |             |          |
| Jan. 01 | Bank A/c (F1) | 3,00,000 | Dec. 31 | Balance c/d | 3,00,000 |
|         |               | 3,00,000 |         |             | 3,00,000 |
| 2011    |               |          | 2011    |             |          |
| Jan. 01 | Balance b/d   | 3,00,000 | Dec. 31 | Balance c/d |          |
| Jul. 01 | Bank A/c (F2) | 1,80,000 |         | F1          | 3,00,000 |
|         |               |          |         | F2          | 1,80,000 |
|         |               | 4,80,000 |         |             | 4,80,000 |
| 2012    |               |          | 2012    |             |          |
| Jan. 01 | Balance b/d   | 4,80,000 | Dec. 31 | Balance c/d |          |
|         | F1            | 3,00,000 |         | F1          | 3,00,000 |
|         | F2            | 1,80,000 |         | F2          | 1,80,000 |
|         |               | 4,80,000 |         |             | 4,80,000 |
|         |               |          |         |             |          |

## Provision for Depreciation Account

| Dr.     |             |                | Cr.     |                            |                |
|---------|-------------|----------------|---------|----------------------------|----------------|
| Date    | Particulars | Amount<br>(Rs) | Date    | Particulars                | Amount<br>(Rs) |
| 2010    |             |                | 2010    |                            |                |
| Dec. 31 | Balance c/d | 15,000         | Dec. 31 | Depreciation A/c (F1)      | 15,000         |
|         |             | 15,000         |         |                            | 15,000         |
| 2011    |             |                | 2011    |                            |                |
|         |             |                | Jan. 01 | Balance b/d                | 15,000         |
| Dec. 31 | Balance c/d | 34,500         | Dec. 31 | Depreciation on-           |                |
|         |             |                |         | F1                         | 15,000         |
|         |             |                |         | F2 ( <i>for 6 months</i> ) | 4,500          |
|         |             | 34,500         |         |                            | 19,500         |
|         |             |                |         |                            | 34,500         |
| 2012    |             |                | 2012    |                            |                |
|         |             |                | Jan. 01 | Balance b/d                | 34,500         |

|         |             |        |         |                  |        |        |
|---------|-------------|--------|---------|------------------|--------|--------|
| Dec. 31 | Balance c/d | 58,500 | Dec. 31 | Depreciation on- |        |        |
|         |             |        |         | F1               | 15,000 |        |
|         |             |        |         | F2               | 9,000  | 24,000 |
|         |             | 58,500 |         |                  |        | 58,500 |
|         |             |        |         |                  |        |        |

| Depreciation Account |                                |                |         |                     |                |
|----------------------|--------------------------------|----------------|---------|---------------------|----------------|
| Dr.                  |                                |                | Cr.     |                     |                |
| Date                 | Particulars                    | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
| 2010                 |                                |                | 2010    |                     |                |
| Dec. 31              | Provision for Depreciation A/c | 15,000         | Dec. 31 | Profit and Loss A/c | 15,000         |
|                      |                                | 15,000         |         |                     | 15,000         |
| 2011                 |                                |                | 2011    |                     |                |
|                      |                                |                |         |                     |                |

|            |                                   |        |            |                        |        |
|------------|-----------------------------------|--------|------------|------------------------|--------|
| Dec.<br>31 | Provision for Depreciation<br>A/c | 19,500 | Dec.<br>31 | Profit and Loss<br>A/c | 19,500 |
|            |                                   | 19,500 |            |                        | 19,500 |
| 2012       |                                   |        | 2012       |                        |        |
| Dec.<br>31 | Provision for Depreciation<br>A/c | 24,000 | Dec.<br>31 | Profit and Loss<br>A/c | 24,000 |
|            |                                   | 24,000 |            |                        | 24,000 |
|            |                                   |        |            |                        |        |

**Example 2:** Totu Ltd., acquired machinery for Rs 10,00,000 on January 01, 2010. In the same year, on April 01, 2010, new machinery costing Rs 6,00,000 was purchased. On October, 2011 another machinery costing Rs 8,00,000 was purchased. Depreciation is provided @ 10% p.a. on Diminishing Balance Method. Prepare Machinery Account and Provision for Depreciation Account up to December 31, 2012, assuming that books are closed on December 31 each year.

### **Solution**

| <b>Machinery Account</b> |                    |                        |             |                    |                        |
|--------------------------|--------------------|------------------------|-------------|--------------------|------------------------|
| <b>Dr.</b>               |                    |                        | <b>Cr.</b>  |                    |                        |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> |
| 2010                     |                    |                        | 2010        |                    |                        |

|         |               |           |           |         |             |           |           |
|---------|---------------|-----------|-----------|---------|-------------|-----------|-----------|
| Jan. 01 | Bank A/c (M1) |           | 10,00,000 | Dec. 31 | Balance c/d |           |           |
| Apr. 01 | Bank A/c (M2) |           | 6,00,000  |         | M1          | 10,00,000 |           |
|         |               |           |           |         | M2          | 6,00,000  | 16,00,000 |
|         |               |           | 16,00,000 |         |             |           | 16,00,000 |
| 2011    |               |           |           | 2011    |             |           |           |
| Jan. 01 | Balance b/d   |           |           | Dec. 31 | Balance c/d |           |           |
|         | M1            | 10,00,000 |           |         | M1          | 10,00,000 |           |
|         | M2            | 6,00,000  | 16,00,000 |         | M2          | 6,00,000  |           |
| Oct. 01 | Bank A/c (M3) |           | 8,00,000  |         | M3          | 8,00,000  | 24,00,000 |
|         |               |           | 24,00,000 |         |             |           | 24,00,000 |
| 2012    |               |           |           | 2012    |             |           |           |
| Jan. 01 | Balance b/d   |           |           | Dec. 31 | Balance c/d |           |           |
|         | M1            | 10,00,000 |           |         | M1          | 10,00,000 |           |
|         | M2            | 6,00,000  |           |         | M2          | 6,00,000  |           |
|         | M3            | 8,00,000  | 24,00,000 |         | M3          | 8,00,000  | 24,00,000 |



|  |  |           |  |  |           |
|--|--|-----------|--|--|-----------|
|  |  | 24,00,000 |  |  | 24,00,000 |
|  |  |           |  |  |           |

| Provision for Depreciation Account |             |                |         |                            |                |
|------------------------------------|-------------|----------------|---------|----------------------------|----------------|
| Dr.                                |             |                | Cr.     |                            |                |
| Date                               | Particulars | Amount<br>(Rs) | Date    | Particulars                | Amount<br>(Rs) |
| 2010                               |             |                | 2010    |                            |                |
| Dec. 31                            | Balance c/d | 1,45,000       | Dec. 31 | Depreciation on-           |                |
|                                    |             |                |         | M1                         | 1,00,000       |
|                                    |             |                |         | M2 ( <i>for 9 months</i> ) | 45,000         |
|                                    |             | 1,45,000       |         |                            | 1,45,000       |
| 2011                               |             |                | 2011    |                            |                |
|                                    |             |                | Jan. 01 | Balance b/d                | 1,45,000       |
| Dec. 31                            | Balance c/d | 3,10,500       | Dec. 31 | Depreciation on-           |                |

|         |             |          |         |                            |        |          |
|---------|-------------|----------|---------|----------------------------|--------|----------|
|         |             |          |         | M1                         | 90,000 |          |
|         |             |          |         | M2                         | 55,500 |          |
|         |             |          |         | M3 ( <i>for 3 months</i> ) | 20,000 | 1,65,500 |
|         |             | 3,10,500 |         |                            |        | 3,10,500 |
| 2012    |             |          | 2012    |                            |        |          |
|         |             |          | Jan. 01 | Balance b/d                |        | 3,10,500 |
|         |             |          | Dec. 31 | Depreciation on-           |        |          |
| Dec. 31 | Balance c/d | 5,19,450 |         | M1                         | 81,000 |          |
|         |             |          |         | M2                         | 49,950 |          |
|         |             |          |         | M3                         | 78,000 | 2,08,950 |
|         |             | 5,19,450 |         |                            |        | 5,19,450 |
|         |             |          |         |                            |        |          |

**Example 3:** On January, 01, 2010, Saini Ltd. bought machinery for Rs 5,40,000 and spent Rs 1,35,000 for its overhauling. On July 01, 2011 it has purchased another second-hand machinery for Rs 2,80,000. On August 30, 2012 the machinery purchased on January 01, 2010 became obsolete and disposed-off for Rs 3,98,000. On the same date, it has purchased new machinery costing Rs 4,60,000. Depreciation is charged at 15% p.a. on Fixed Installment Method.

Prepare necessary ledger accounts assuming that books are closed on December 31 every year, if:

**Case i-** Provision for Depreciation Account is not maintained

**Case ii-** Provision for Depreciation Account is maintained

***Solution***

**Case i-** *When Provision for Depreciation Account is not maintained*

| <b>Machinery Account</b> |   |                        |             |                          |                        |
|--------------------------|---|------------------------|-------------|--------------------------|------------------------|
| <b>Dr.</b>               |   |                        | <b>Cr.</b>  |                          |                        |
| <b>Date</b>              | <b>Particulars</b>                        | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b>       | <b>Amount<br/>(Rs)</b> |
| 2010                     |   |                        | 2010        |                          |                        |
| Jan.<br>01               | Bank A/c (M1)<br>(5,40,000 +<br>1,35,000) | 6,75,000               | Dec.<br>31  | Depreciation A/c<br>(M1) | 1,01,250               |
|                          |   |                        | Dec.<br>31  | Balance c/d              | 5,73,750               |
|                          |   | 6,75,000               |             |                          | 6,75,000               |
| 2011                     |   |                        | 2011        |                          |                        |
|                          |   |                        |             |                          |                        |

|         |               |          |          |         |  |          |
|---------|---------------|----------|----------|---------|--|----------|
| Jan. 01 | Balance b/d   |          | 5,73,750 | Dec. 31 | Depreciation A/c                               |          |
| Jul. 01 | Bank A/c (M2) |          | 2,80,000 |         | M1   | 1,01,250 |
|         |               |          |          |         | M2 ( <i>for 6 months</i> )                     | 21,000   |
|         |               |          |          |         |  | 1,22,250 |
|         |               |          |          | Dec. 31 | Balance c/d                                    |          |
|         |               |          |          |         | M1   | 4,72,500 |
|         |               |          |          |         | M2   | 2,59,000 |
|         |               |          |          |         |  | 7,31,500 |
|         |               |          | 8,53,750 |         |  | 8,53,750 |
| 2012    |               |          |          | 2012    |  |          |
| Jan. 01 | Balance b/d   |          |          | Aug.30  | Depreciation A/c ( <i>on M1 for 8 months</i> ) |          |
|         | M1            | 4,72,500 |          |         | Bank A/c ( <i>Sale of M1</i> )                 |          |
|         | M2            | 2,59,000 | 7,31,500 |         | Profit and Loss A/c ( <i>Loss on Sale</i> )    |          |
|         |               |          |          |         | 7,000  |          |
| Aug.30  | Bank A/c (M3) |          | 4,60,000 | Dec. 31 | Depreciation on-                               |          |

|  |  |           |         |                            |          |           |
|--|--|-----------|---------|----------------------------|----------|-----------|
|  |  |           |         | M2                         | 42,000   |           |
|  |  |           |         | M3 ( <i>for 4 months</i> ) | 23,000   | 65,000    |
|  |  |           | Dec. 31 | Balance c/d                |          |           |
|  |  |           |         | M2                         | 2,17,000 |           |
|  |  |           |         | M3                         | 4,37,000 | 6,54,000  |
|  |  | 11,91,500 |         |                            |          | 11,91,500 |
|  |  |           |         |                            |          |           |

**Working Notes:** Calculation of Profit or Loss on Sale

| Particulars                     | Amount   |
|---------------------------------|----------|
| Value of M1 as on Jan. 01, 2012 | 4,72,500 |
| Less: Depreciation for 8 months | (67,500) |
| Value of M1 as on Aug. 30, 2012 | 4,05,000 |
|                                 |          |

|                     |              |
|---------------------|--------------|
| Less: Sale Value    | (3,98,000)   |
| <b>Loss on Sale</b> | <b>7,000</b> |
|                     |              |

**Case ii-** When Provision for Depreciation Account is maintained

| <b>Machinery Account</b> |                    |                        |             |                    |                        |  |
|--------------------------|--------------------|------------------------|-------------|--------------------|------------------------|--|
| <b>Dr.</b>               |                    |                        |             | <b>Cr.</b>         |                        |  |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> |  |
| 2010                     |                    |                        | 2010        |                    |                        |  |
| Jan. 01                  | Bank A/c (M1)      | 6,75,000               | Dec. 31     | Balance c/d        | 6,75,000               |  |
|                          |                    | 6,75,000               |             |                    | 6,75,000               |  |
| 2011                     |                    |                        | 2011        |                    |                        |  |
| Jan. 01                  | Balance b/d        | 6,75,000               | Dec. 31     | Balance c/d        |                        |  |
| Jul. 01                  | Bank A/c (M2)      | 2,80,000               |             | M1                 | 6,75,000               |  |

|         |               |           |          |                                |   |           |
|---------|---------------|-----------|----------|--------------------------------|---|-----------|
|         |               |           |          | M2                             | 2,80,000                                    | 9,55,000  |
|         |               | 9,55,000  |          |                                |   | 9,55,000  |
| 2012    |               |           | 2012     |                                |   |           |
| Jan. 01 | Balance b/d   |           | Aug. 30  | Provision for Depreciation A/c |   | 2,70,000  |
|         | M1            | 6,75,000  | Aug. 30  | Bank A/c ( <i>Sale of M1</i> ) |   | 3,98,000  |
|         | M2            | 2,80,000  | 9,55,000 | Aug. 30                        | Profit and Loss A/c ( <i>Loss on Sale</i> ) | 7,000     |
| Aug. 30 | Bank A/c (M3) | 4,60,000  | Dec. 31  | Balance c/d                    |   |           |
|         |               |           |          | M2                             | 2,80,000                                    |           |
|         |               |           |          | M3                             | 4,60,000                                    | 7,40,000  |
|         |               | 14,15,000 |          |                                |   | 14,15,000 |
|         |               |           |          |                                |   |           |

### Provision for Depreciation Account

| Dr.        |                                   |          |                | Cr.        |                          |          |                |
|------------|-----------------------------------|----------|----------------|------------|--------------------------|----------|----------------|
| Date       | Particulars                       |          | Amount<br>(Rs) | Date       | Particulars              |          | Amount<br>(Rs) |
| 2010       |                                   |          |                | 2010       |                          |          |                |
| Dec.<br>31 | Balance c/d                       |          | 1,01,250       | Dec.<br>31 | Depreciation A/c<br>(M1) |          | 1,01,250       |
|            |                                   |          | 1,01,250       |            |                          |          | 1,01,250       |
| 2011       |                                   |          |                | 2011       |                          |          |                |
|            |                                   |          |                | Jan.<br>01 | Balance b/d              |          | 1,01,250       |
| Dec.<br>31 | Balance c/d                       |          |                | Dec.<br>31 | Depreciation on-         |          |                |
|            | M1                                | 2,02,500 |                |            | M1                       | 1,01,250 |                |
|            | M2                                | 21,000   | 2,23,500       |            | M2                       | 21,000   | 1,22,250       |
|            |                                   |          | 2,23,500       |            |                          |          | 2,23,500       |
| 2012       |                                   |          |                | 2012       |                          |          |                |
| Aug.<br>30 | Machinery A/c (2,02,500 + 67,500) |          | 2,70,000       | Jan.<br>01 | Balance b/d              |          |                |



|         |                             |        |          |                                   |          |          |
|---------|-----------------------------|--------|----------|-----------------------------------|----------|----------|
|         | (Transfer to Machinery A/c) |        |          | M1                                | 2,02,500 |          |
|         |                             |        |          | M2                                | 21,000   | 2,23,500 |
|         |                             |        | Dec. 31  | Depreciation on M1 (for 8 months) |          | 67,500   |
| Dec. 31 | Balance c/d                 |        | Dec. 31  | Depreciation on-                  |          |          |
|         | M2 (21,000 + 42,000)        | 63,000 |          | M2                                | 42,000   |          |
|         | M3                          | 23,000 | 86,000   | M3                                | 23,000   | 65,000   |
|         |                             |        | 3,56,000 |                                   |          | 3,56,000 |
|         |                             |        |          |                                   |          |          |

**Example 4:** On January 01, 2012, Jindal Ltd. has a balance of Rs 11,60,000 in its Plant Account and Rs 4,49,500 in its Provision for Depreciation Account. On March 31, 2012, a plant costing Rs 1,74,000 that was purchased on January 01, 2009 becomes outdated and auctioned for Rs 90,000. On the same date, a new plant costing Rs 46,400 was purchased. Depreciation is charged @ 15% p.a. on original cost method. The firm closes its books on December 31 each year.

Prepare Plant Account, Provision for Depreciation Account and Depreciation Account for the year 2012.

**Solution**

|  |
|--|
|  |
|--|

| Plant Account |  |                |            |  |                |
|---------------|--|----------------|------------|--|----------------|
| Dr.           |  |                | Cr.        |  |                |
| Date          | Particulars                              | Amount<br>(Rs) | Date       | Particulars                                    | Amount<br>(Rs) |
| 2012          |  |                | 2012       |  |                |
| Jan.<br>01    | Balance b/d                              | 11,60,000      | Mar.<br>31 | Provision for Depreciation<br>A/c              | 84,825         |
| Mar.<br>31    | Profit and Loss<br>A/c ( <i>Profit</i> ) | 825            | Mar.<br>31 | Bank A/c                                       | 90,000         |
| Mar.<br>31    | Bank A/c                                 | 46,400         | Dec.<br>31 | Balance c/d (11,60,000 –<br>1,74,000 + 46,400) | 10,32,400      |
|               |  |                |            |  |                |
|               |  | 12,07,225      |            |  | 12,07,225      |
|               |  |                |            |  |                |

| Provision for Depreciation Account |  |  |     |  |  |
|------------------------------------|--|--|-----|--|--|
| Dr.                                |  |  | Cr. |  |  |
|                                    |  |  |     |  |  |

| Date    | Particulars | Amount<br>(Rs) | Date    | Particulars                           | Amount<br>(Rs) |
|---------|-------------|----------------|---------|---------------------------------------|----------------|
| 2012    |             |                | 2012    |                                       |                |
| Mar. 31 | Plant A/c   | 84,825         | Jan. 01 | Balance b/d                           | 4,49,500       |
|         |             |                | Mar. 31 | Depreciation ( <i>on plant sold</i> ) | 6,525          |
| Dec. 31 | Balance c/d | 5,24,320       | Dec.31  | Depreciation on-                      |                |
|         |             |                |         | (9,86,000 × 15%)                      | 1,47,900       |
|         |             |                |         | (46,400 × 15% × 9/12)                 | 5,220          |
|         |             | 6,09,145       |         |                                       | 6,09,145       |
|         |             |                |         |                                       |                |

### **Working Notes:**

#### **WN1: Calculation of Depreciation on Plant Sold**

Original Cost of Plant Sold = Rs 1,74,000

Depreciation for full year =  $1,74,000 \times 15\% = 26,100$   
 Depreciation for 3 months =  $1,74,000 \times 15\% \times \frac{3}{12} = 6,525$   
 Depreciation for full year =  $1,74,000 \times 15\% = 26,100$   
 Depreciation for 3 months =  $1,74,000 \times 15\% \times \frac{3}{12} = 6,525$

#### **WN2: Calculation of Profit or Loss on Sale**

| Particulars   | Amount     |
|---|------------|
| Value of Plant as on January 01, 2009                 | 1,74,000   |
| Less: Depreciation (26,100 + 26,100 + 26,100 + 6,525) | (84,825)   |
| Value of Plant as on March 31, 2012                   | 89,175     |
| Less: Sale Value                                      | (90,000)   |
| <b>Profit on Sale</b>                                 | <b>825</b> |
|   |            |

**Example 5:** The following balances are appearing in the books of Shaina Ltd., as on 1<sup>st</sup> April, 2019:

Machinery Account = Rs. 10,00,000

Provision for Depreciation Account = Rs. 4, 00,000

On 1<sup>st</sup> October, 2019, a machinery which was purchased on 1<sup>st</sup> April, 2015 for Rs. 5,00,000 was sold for Rs. 2,20,000 plus CGST and SGST @6% each. The firm is charging depreciation @ 10% p.a. on Original Cost Method and closes its books on 31<sup>st</sup> March every year. You are required to prepare Machinery Account and Provision for Depreciation Account for the year 2019-20. Also, pass Journal entry for the sale of machinery.

**Answer:**

|      |             |               |      |             |     |     |
|------|-------------|---------------|------|-------------|-----|-----|
| Dr.  |             | Machinery A/c |      |             |     | Cr. |
| Date | Particulars | Rs.           | Date | Particulars | Rs. |     |

|       |                |                         |                |  |                         |
|-------|----------------|-------------------------|----------------|--|-------------------------|
| 2019  |                |                         | 2019           |  |                         |
| Apr.1 | To Balance b/d | 10,00,000               | Oct.1          | By Bank A/c  | 2,20,000                |
|       |                |                         | Oct. 1         | By Provision for Depreciation A/c                          | 2,25,000                |
|       |                |                         | Oct. 1         | By Loss on Sale of Machinery A/c (Profit & Loss A/c) (WN1) | 55,000                  |
|       |                |                         | 2020<br>Mar.31 | By Balance c/d   | 5,00,000                |
|       |                | <b><u>10,00,000</u></b> |                |  | <b><u>10,00,000</u></b> |
|       |                |                         |                |  |                         |

| Dr.            | Provision For Depreciation A/c |          |               |  | Cr.      |
|----------------|--------------------------------|----------|---------------|--|----------|
| Date           | Particulars                    | Rs.      | Date          | Particulars  | Rs.      |
| 2019<br>Oct.1  | To Machinery A/c (WN1)         | 2,25,000 | 2019<br>Apr.1 | By Balance b/d                                     | 4,00,000 |
| 2020<br>Mar.31 | To Balance c/d                 | 2,50,000 | Oct. 1        | By Depreciation A/c (on machine sold for 4 months) | 25,000   |

|  |  |                        |                |                              |                        |
|--|--|------------------------|----------------|------------------------------|------------------------|
|  |  |                        | 2020<br>Mar.31 | By Depreciation<br>A/c (WN2) | 50,000                 |
|  |  |                        |                |                              |                        |
|  |  | <b><u>4,75,000</u></b> |                |                              | <b><u>4,75,000</u></b> |
|  |  |                        |                |                              |                        |

### **Journal Entry on Sale of Machinery**

| Date | Particulars  |     | L.F. | Dr.(Rs.) | Cr.(Rs.) |
|------|--|-----|------|----------|----------|
|      | Bank A/c   |     |      |          |          |
|      | Provision for Depreciation<br>A/c  |     |      |          |          |
|      | Loss on Sale of Machinery<br>A/c   | Dr. |      | 2,46,400 |          |
|      | To Machinery A/c   | Dr. |      | 2,25,000 |          |
|      | To Output CGST A/c   | Dr. |      | 55,000   | 5,00,000 |
|      | To Output SGST A/c   |     |      |          | 13,200   |
|      | (Being the machinery sold<br>and loss on sale of<br>machinery transferred to<br>Profit and Loss Account) |     |      |          | 13,200   |

**Note:** GST received on sale of the machinery is not be added to the sale proceeds.

### Working Notes:

#### 1) Computation of Profit/Loss on sale of Machinery

| Particulars  | Rs.           |
|--|---------------|
| Cost of Machinery ( As on 1st April,2015)                                | 5,00,000      |
| Less: Provision For Depreciation<br>(50,000+50,000+50,000+50,000+25,000) | 2,25,000      |
| Book Value as on 1st October, 2019                                       | 2,75,000      |
| Less: Sale Proceeds  | 2,20,000      |
| Loss on Sale of Machinery  | <u>55,000</u> |

#### 2) Depreciation to be charged as on 31st March, 2020:

|   |           |
|---|-----------|
| On Balance Machinery (i.e.10,00,000-5,00,000)@10% | Rs.50,000 |
|---|-----------|

## Comprehensive Examples

### Objective

In the previous lessons, we have learnt the various concepts and aspects of depreciation along with numerical examples. Now, in this lesson, we will be dealing with some more comprehensive examples that will help you to further enhance your knowledge on the concept of depreciation.

**Example 1:** On April 01, 2010, Janvi Ltd. has balance of Rs 9,50,000 in its Machinery Account. On October 01, 2010 it purchased a second-hand machinery for Rs 2,20,000 and paid Rs 25,000 for brokerage and Rs 55,000 for its overhauling. On December 31, 2011, machinery purchased on October 01, 2010 was disposed-off at a loss of Rs 18,700 due its bad working condition. In the next year on July, 01, 2012, a new machinery costing Rs 5,00,000 was purchased. Depreciation is charged @ 10% p.a. on the Diminishing Balance Method. The Books are closed on March 31 each year. Record the necessary Journal entries in the books and prepare Machinery Account and Depreciation Account.

**Solution**

| <b>Journal</b> |  |     |             |                       |                        |
|----------------|--|-----|-------------|-----------------------|------------------------|
| <b>Date</b>    | <b>Particulars</b>                         |     | <b>L.F.</b> | <b>Debit<br/>(Rs)</b> | <b>Credit<br/>(Rs)</b> |
| 2010-11        |  |     |             |                       |                        |
| Oct. 01        | Machinery A/c (2,20,000 + 25,000 + 55,000) | Dr. |             | 3,00,000              |                        |
|                | To Bank A/c                                |     |             |                       | 3,00,000               |
|                | (Machinery purchased)                      |     |             |                       |                        |
|                |  |     |             |                       |                        |
| Mar. 31        | Depreciation A/c                           | Dr. |             | 1,10,000              |                        |
|                |  |     |             |                       |                        |



|             |   |     |  |          |          |
|-------------|---|-----|--|----------|----------|
|             | To Machinery A/c                                      |     |  |          | 1,10,000 |
|             | (Depreciation charged on machinery)                   |     |  |          |          |
|             |   |     |  | 1,10,000 |          |
| Mar.<br>31  | Profit and Loss A/c                                   | Dr. |  |          | 1,10,000 |
|             | To Depreciation A/c                                   |     |  |          |          |
|             | (Depreciation transferred to profit and loss account) |     |  |          |          |
|             |   |     |  |          |          |
| 2011-<br>12 |   |     |  |          |          |
| Dec.<br>31  | Bank A/c  | Dr. |  | 2,44,925 |          |
|             | To Machinery A/c                                      |     |  |          | 2,44,925 |
|             | (Machinery sold)                                      |     |  |          |          |
|             |   |     |  |          |          |
| Dec.<br>31  | Profit and Loss A/c                                   | Dr. |  | 18,700   |          |

|             |   |     |  |          |          |
|-------------|---|-----|--|----------|----------|
|             | To Machinery A/c                                      |     |  |          | 18,700   |
|             | (Loss on sale of machinery)                           |     |  |          |          |
|             |   |     |  |          |          |
| Mar.<br>31  | Depreciation A/c (21,375 + 85,500)                    | Dr. |  | 1,06,875 |          |
|             | To Machinery A/c                                      |     |  |          | 1,06,875 |
|             | (Depreciation charged on machinery)                   |     |  |          |          |
|             |   |     |  |          |          |
| Mar.<br>31  | Profit and Loss A/c                                   | Dr. |  | 1,06,875 |          |
|             | To Depreciation A/c                                   |     |  |          | 1,06,875 |
|             | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|             |   |     |  |          |          |
| 2012-<br>13 |   |     |  |          |          |
| Jul. 01     | Machinery A/c   | Dr. |  | 5,00,000 |          |
|             |   |     |  |          |          |

|            |   |     |  |          |          |
|------------|---|-----|--|----------|----------|
|            | To Bank A/c   |     |  |          | 5,00,000 |
|            | (Machinery purchased)                                 |     |  |          |          |
|            |   |     |  |          |          |
| Mar.<br>31 | Depreciation A/c (76,950 + 37,500)                    | Dr. |  | 1,14,450 |          |
|            | To Machinery A/c                                      |     |  |          | 1,14,450 |
|            | (Depreciation charged on machinery)                   |     |  |          |          |
|            |   |     |  |          |          |
| Mar.<br>31 | Profit and Loss A/c (76,950 + 37,500)                 | Dr. |  | 1,14,450 |          |
|            | To Depreciation A/c                                   |     |  |          | 1,14,450 |
|            | (Depreciation transferred to Profit and Loss Account) |     |  |          |          |
|            |   |     |  |          |          |

|                          |            |
|--------------------------|------------|
| <b>Machinery Account</b> |            |
| <b>Dr.</b>               | <b>Cr.</b> |

| Date    | Particulars      |          | Amount<br>(Rs) | Date    | Particulars                                    |          | Amount<br>(Rs) |
|---------|------------------|----------|----------------|---------|--|----------|----------------|
| 2010-11 |                  |          |                | 2010-11 |  |          |                |
| Apr. 01 | Balance b/d (M1) |          | 9,50,000       | Mar. 31 | Depreciation on-                               |          |                |
| Oct. 01 | Bank A/c (M2)    |          | 3,00,000       |         | M1   | 95,000   |                |
|         |                  |          |                |         | M2 ( <i>for 6 months</i> )                     | 15,000   | 1,10,000       |
|         |                  |          |                | Mar. 31 | Balance c/d                                    |          |                |
|         |                  |          |                |         | M1   | 8,55,000 |                |
|         |                  |          |                |         | M2   | 2,85,000 | 11,40,000      |
|         |                  |          | 12,50,000      |         |  |          | 12,50,000      |
| 2011-12 |                  |          |                | 2011-12 |  |          |                |
| Apr. 01 | Balance b/d      |          |                | Dec. 31 | Depreciation A/c ( <i>on M2 for 9 months</i> ) |          | 21,375         |
|         | M1               | 8,55,000 |                | Dec.    | Profit and Loss A/c                            |          | 18,700         |

|          |                  |          |           |            |                                    |          |           |
|----------|------------------|----------|-----------|------------|------------------------------------|----------|-----------|
|          |                  |          |           | 31         | (Loss on sale)                     |          |           |
|          | M2               | 2,85,000 | 11,40,000 | Dec.<br>31 | Bank A/c ( <i>Sale of M2- WN</i> ) |          | 2,44,925  |
|          |                  |          |           | Mar.<br>31 | Depreciation (M1)                  |          | 85,500    |
|          |                  |          |           | Mar.<br>31 | Balance c/d (M1)                   |          | 7,69,500  |
|          |                  |          | 11,40,000 |            |                                    |          | 11,40,000 |
| 2012-13  |                  |          |           | 2012-13    |                                    |          |           |
| Apr. 01  | Balance b/d (M1) | 7,69,500 |           | Mar.<br>31 | Depreciation on-                   |          |           |
| July. 01 | Bank A/c (M3)    | 5,00,000 |           |            | M1                                 | 76,950   |           |
|          |                  |          |           |            | M3 ( <i>for 9 months</i> )         | 37,500   | 1,14,450  |
|          |                  |          |           | Mar.<br>31 | Balance c/d                        |          |           |
|          |                  |          |           |            | M1                                 | 6,92,550 |           |
|          |                  |          |           |            | M3                                 | 4,62,500 | 11,55,050 |
|          |                  |          |           |            |                                    |          |           |

|  |  |           |  |  |           |
|--|--|-----------|--|--|-----------|
|  |  | 12,69,500 |  |  | 12,69,500 |
|  |  |           |  |  |           |

**Working Notes:** Calculation of Sale Value of M2

| <b>Particulars</b>                  | <b>Amount<br/>(Rs)</b> |
|-------------------------------------|------------------------|
| Value of M2 as on April 01, 2011    | 2,85,000               |
| Less: Depreciation for 9 months     | (21,375)               |
| Value of M2 as on December 31, 2011 | 2,63,625               |
| Less: Loss on Sale                  | (18,700)               |
| <b>Sale Value</b>                   | <b>2,44,925</b>        |
|                                     |                        |

| <b>Depreciation Account</b> |            |
|-----------------------------|------------|
| <b>Dr.</b>                  | <b>Cr.</b> |
|                             |            |

| Date    | Particulars   | Amount<br>(Rs) | Date    | Particulars         | Amount<br>(Rs) |
|---------|---------------|----------------|---------|---------------------|----------------|
| 2010-11 |               |                | 2010-11 |                     |                |
| Mar. 31 | Machinery A/c | 1,10,000       | Mar. 31 | Profit and Loss A/c | 1,10,000       |
|         |               | 1,10,000       |         |                     | 1,10,000       |
| 2011-12 |               |                | 2011-12 |                     |                |
| Mar. 31 | Machinery A/c | 1,06,875       | Mar. 31 | Profit and Loss A/c | 1,06,875       |
|         |               | 1,06,875       |         |                     | 1,06,875       |
| 2012-13 |               |                | 2012-13 |                     |                |
| Mar. 31 | Machinery A/c | 1,14,450       | Mar. 31 | Profit and Loss A/c | 1,14,450       |
|         |               | 1,14,450       |         |                     | 1,14,450       |
|         |               |                |         |                     |                |

**Example 2:** A company bought a new furniture costing Rs 2,50,000 on April 01, 2009. On September 01, 2011, the company sold  $\frac{1}{5}$ <sup>th</sup> of its furniture for Rs 21,300 due to damage. During the year 2012, on July 01, additional furniture costing Rs 80,000 was purchased and Rs 5,000 was paid for its cartage. Depreciation is charged @10% p.a. on Written Down Value Method. Prepare Furniture account for the period from 2009 to 2012. The books are closed on December 31 every year.

**Solution**

| Furniture Account |                  |                |            |  |                |
|-------------------|------------------|----------------|------------|--|----------------|
| Dr.               |                  |                | Cr.        |  |                |
| Date              | Particulars      | Amount<br>(Rs) | Date       | Particulars                              | Amount<br>(Rs) |
| 2009              |                  |                | 2009       |  |                |
| Jan.<br>01        | Bank A/c<br>(F1) | 2,50,000       | Dec.<br>31 | Depreciation A/c ( <i>for 9 months</i> ) | 18,750         |
|                   |                  |                | Dec.<br>31 | Balance c/d                              | 2,31,250       |
|                   |                  | 2,50,000       |            |  | 2,50,000       |
| 2010              |                  |                | 2010       |  |                |
| Jan.<br>01        | Balance b/d      | 2,31,250       | Dec.<br>31 | Depreciation A/c                         | 23,125         |
|                   |                  |                | Dec.<br>31 | Balance c/d                              | 2,08,125       |
|                   |                  | 2,31,250       |            |  | 2,31,250       |
|                   |                  |                |            |  |                |



|            |                  |          |             |   |          |
|------------|------------------|----------|-------------|---|----------|
| 2011       |                  |          | 2011        |   |          |
| Jan.<br>01 | Balance b/d      | 2,08,125 | Sept.<br>01 | Depreciation A/c ( <b>WN</b> )*             | 2,775    |
|            |                  |          | Sept.<br>01 | Bank A/c ( <i>Sale</i> )                    | 21,300   |
|            |                  |          | Sept.<br>01 | Profit and Loss A/c ( <i>Loss on sale</i> ) | 17,550   |
|            |                  |          | Dec.<br>31  | Depreciation ( <b>WN</b> )**                | 16,650   |
|            |                  |          | Dec.<br>31  | Balance c/d                                 | 1,49,850 |
|            |                  | 2,08,125 |             |   | 2,08,125 |
| 2012       |                  |          | 2012        |   |          |
| Jan.<br>01 | Balance b/d      | 1,49,850 | Dec.<br>31  | Depreciation on-                            |          |
| Jul.<br>01 | Bank A/c<br>(F2) | 85,000   |             | F1  | 14,985   |
|            |                  |          |             | F2 ( <i>for 6 months</i> )                  | 4,250    |
|            |                  |          | Dec.<br>31  | Balance c/d                                 | 19,235   |
|            |                  |          |             |   |          |

|  |  |          |  |    |          |          |
|--|--|----------|--|----|----------|----------|
|  |  |          |  | F1 | 1,34,865 |          |
|  |  |          |  | F2 | 80,750   | 2,15,615 |
|  |  | 2,34,850 |  |    |          | 2,34,850 |
|  |  |          |  |    |          |          |

**Working Notes:**

**Calculation of Depreciation on Furniture Sold**

| <b>Particulars</b>  | <b>Amount<br/>(Rs)</b> |
|---|------------------------|
| Value of 1/5 <sup>th</sup> of Furniture Sold on Jan. 01 2011<br>(1/5 <sup>th</sup> of 2,08,125) | 41,625                 |
| Less: Depreciation for 8 months (from Jan.01 to Sept. 01)                                       | (2,775)*               |
| Value as on Sept. 01, 2011  | 38,850                 |
| Less: Sale Value  | (21,300)               |
| <b>Loss on Sale</b>   | <b>17,550</b>          |
|   |                        |

Value of Remaining Furniture as on Jan. 01, 2011 = 2,08,125 – 41,625 = 1,66,500

Depreciation on remaining furniture for full year = 1,66,500 × 10% = 16,650\*\*

∴ Value of Furniture as on Dec. 31, 2011 = 1,66,500 – 16,650 = Rs 1,49,850

**Example 3:** On January 01, 2012, the machinery account of Nitika Ltd. showed a balance of Rs 1,11,870 (original cost Rs 1,62,690). On April 01, 2012, a new machinery was acquired for Rs 49,500. On September 30, 2012, an old machinery, which was purchased at a cost of Rs 51,100 on March 01, 2010 was sold for Rs 30,360. The company has a policy to charge full year's depreciation on all the purchases made during the year and avoid depreciation on the sale of machinery during the year. Depreciation is charged @ 15% p.a. on Straight Line Method. Prepare Machinery Account for the year ending December 31, 2012.

### **Solution**

| <b>Machinery Account</b> |                    |                        |             |                                       |                        |
|--------------------------|--------------------|------------------------|-------------|---------------------------------------|------------------------|
| <b>Dr.</b>               |                    |                        | <b>Cr.</b>  |                                       |                        |
| <b>Date</b>              | <b>Particulars</b> | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b>                    | <b>Amount<br/>(Rs)</b> |
| 2012                     |                    |                        | 2012        |                                       |                        |
| Jan. 01                  | Balance b/d (M1)   | 1,11,870               | Sept. 30    | Bank A/c ( <i>Sale of machinery</i> ) | 30,360                 |
| Apr.                     | Bank A/c           | 49,500                 | Sept.       | Profit and Loss A/c ( <i>Loss on</i>  | 5,410                  |

|    |               |          |            |                                    |          |
|----|---------------|----------|------------|------------------------------------|----------|
| 01 | (Purchase-M2) |          | 30         | sale)                              |          |
|    |               |          | Dec.<br>31 | Depreciation A/c                   |          |
|    |               |          |            | M1                                 | 16,739   |
|    |               |          |            | M2                                 | 7,425    |
|    |               |          |            |                                    | 24,164   |
|    |               |          | Dec.<br>31 | Balance c/d                        |          |
|    |               |          |            | M1 (1,11,870 –<br>35,770 – 16,739) | 59,361   |
|    |               |          |            | M2 (49,500 –<br>7,425)             | 42,075   |
|    |               |          |            |                                    | 1,01,436 |
|    |               | 1,61,370 |            |                                    | 1,61,370 |
|    |               |          |            |                                    |          |

**Working Notes: WN1: Calculation of Profit or Loss on Sale**

| Particulars                            | Amount<br>(Rs) |
|--|----------------|
| Cost of Machinery as on March 01, 2010 | 51,100         |
| Less: Depreciation* (for 2010)         | (7,665)        |

|  |              |
|--|--------------|
| Value as on January 01, 2011           | 43,435       |
| Less: Depreciation ( <i>for 2011</i> ) | (7,665)      |
| Value as on January 01, 2012           | 35,770       |
| Less: Depreciation ( <i>for 2012</i> ) | Nil*         |
|  | 35,770       |
| Less: Sale Value                       | (30,360)     |
| <b>Loss on Sale</b>                    | <b>5,410</b> |
|  |              |

\***Note**- The company is following the policy of charging full year's depreciation on machinery purchased at any time during the year and ignoring the depreciation on the machinery sold at any time during the year. Therefore, depreciation for the year 2010 is charged for the full year on Rs 51,100. Similarly, by following this policy, when this machinery is sold during the year 2012, no depreciation is charged.

**WN2: Calculation of Depreciation on Remaining Machines**

***Depreciation on Existing Machine***

| Particulars | Amount |
|-------------|--------|
|             |        |

|   | (Rs)     |
|---|----------|
| Original Cost of Machinery as on January 01, 2010 | 1,62,690 |
| Less: Original Cost of Machinery Sold             | (51,100) |
| Original Cost of remaining machine                | 1,11,590 |
| ∴ Depreciation on remaining machine @ 15%         | 16,739   |
|   |          |

### ***Depreciation on Machinery Purchased***

| Particulars  | Amount<br>(Rs) |
|--|----------------|
|  |                |
| Original Cost of Machinery purchased on April 01, 2012 | 49,500         |
| ∴ Depreciation @ 15% for full year                     | 7,425          |
|  |                |

***Example 4:*** On January 01, 2010, Mate Ltd. purchased 6 trucks for Rs 1,50,000 each. On November 30, 2011, the company sold its 2 trucks for Rs 1,90,000 and

on the same day, a new truck was purchased for Rs 2,40,000. On July 01, 2012, another truck which was purchased on January 01, 2010 met with an accident and was destroyed. The amount of Rs 35,000 were recovered from the insurance company in full settlement. On the same date, second-hand truck was purchased for Rs 1,75,000. Depreciation is charged @ 20% p.a. on Fixed Instalment Method and books are closed on December 31 every year. You are required to prepare:

1. Truck Account
- ii. Provision for Depreciation Account and
- iii. Depreciation Account

### ***Solution***

| <b>Truck Account</b> |                            |                        |             |   |                        |
|----------------------|----------------------------|------------------------|-------------|---|------------------------|
| <b>Dr.</b>           |                            |                        | <b>Cr.</b>  |   |                        |
| <b>Date</b>          | <b>Particulars</b>         | <b>Amount<br/>(Rs)</b> | <b>Date</b> | <b>Particulars</b>                                  | <b>Amount<br/>(Rs)</b> |
| 2010                 |                            |                        | 2010        |   |                        |
| Jan.<br>01           | Bank A/c<br>(1,50,000 × 6) | 9,00,000               | Dec.<br>31  | Balance c/d   | 9,00,000               |
|                      |                            | 9,00,000               |             |   | 9,00,000               |
| 2011                 |                            |                        | 2011        |   |                        |
| Jan.<br>01           | Balance b/d                | 9,00,000               | Nov.<br>30  | Provision for<br>Depreciation A/c<br>( <b>WN1</b> ) | 1,15,000               |

|            |  |           |            |   |           |
|------------|--|-----------|------------|---|-----------|
| Nov.<br>30 | Profit and Loss A/c<br>( <i>Profit on sale</i> ) | 5,000     | Nov.<br>30 | Bank A/c ( <i>Sale</i> )                            | 1,90,000  |
| Nov.<br>30 | Bank A/c<br>( <i>Purchase</i> )                  | 2,40,000  | Dec.<br>31 | Balance c/d   | 8,40,000  |
|            |  | 11,45,000 |            |   | 11,45,000 |
| 2012       |  |           | 2012       |   |           |
| Jan.<br>01 | Balance b/d                                      | 8,40,000  | Jul.<br>01 | Provision for<br>Depreciation A/c<br>( <b>WN3</b> ) | 75,000    |
| Jul.<br>01 | Bank A/c   | 1,75,000  | Jul.<br>01 | Bank A/c (Amount<br>received from<br>Insurance Co.) | 35,000    |
|            |  |           | Jul.<br>01 | Profit and Loss A/c<br>( <i>Loss- WN4</i> )         | 40,000    |
|            |  |           | Dec.<br>31 | Balance c/d   | 8,65,000  |
|            |  | 10,15,000 |            |   | 10,15,000 |
|            |  |           |            |   |           |

**Provision Depreciation Account**



| Dr.        |                             |                | Cr.        |   |                |          |
|------------|-----------------------------|----------------|------------|---|----------------|----------|
| Date       | Particulars                 | Amount<br>(Rs) | Date       | Particulars   | Amount<br>(Rs) |          |
| 2010       |                             |                | 2010       |   |                |          |
| Dec.<br>31 | Balance c/d                 | 1,80,000       | Dec.<br>31 | Depreciation A/c (9,00,000 × 20%)                     | 1,80,000       |          |
|            |                             | 1,80,000       |            |   | 1,80,000       |          |
| 2011       |                             |                | 2011       |   |                |          |
| Nov.<br>30 | Truck A/c<br>( <b>WN1</b> ) | 1,15,000       | Jan.<br>01 | Balance b/d   | 1,80,000       |          |
| Dec.<br>31 | Balance c/d                 | 2,44,000       | Nov.<br>30 | Depreciation A/c ( <i>on 2 trucks for 11 months</i> ) | 55,000         |          |
|            |                             |                | Dec.<br>31 | Depreciation-   |                |          |
|            |                             |                |            | On 6,00,000   | 1,20,000       |          |
|            |                             |                |            | On 2,40,000 ( <i>for 1 month</i> )                    | 4,000          | 1,24,000 |
|            |                             | 3,55,000       |            |   | 3,59,000       |          |

|         |                          |          |         |  |          |
|---------|--------------------------|----------|---------|--|----------|
| 2012    |                          |          | 2012    |  |          |
| Jul. 01 | Truck A/c ( <b>WN3</b> ) | 75,000   | Jan. 01 | Balance b/d                                      | 2,44,000 |
| Dec. 31 | Balance c/d              | 2,91,500 | Jul. 01 | Depreciation A/c (20 % on 1,50,000 for 6 months) | 15,000   |
|         |                          |          | Dec. 31 | Depreciation-                                    |          |
|         |                          |          |         | On 4,50,000                                      | 90,000   |
|         |                          |          |         | On 1,75,000 ( <i>for 6 months</i> )              | 17,500   |
|         |                          |          |         |  | 1,07,500 |
|         |                          | 3,66,500 |         |  | 3,66,500 |
|         |                          |          |         |  |          |
|         |                          |          |         |  |          |

| Depreciation Account |             |             |      |             |             |
|----------------------|-------------|-------------|------|-------------|-------------|
| Dr.                  |             |             | Cr.  |             |             |
| Date                 | Particulars | Amount (Rs) | Date | Particulars | Amount (Rs) |

|         |                                |          |         |  |          |
|---------|--------------------------------|----------|---------|--|----------|
| 2010    |                                |          | 2010    |  |          |
| Dec. 31 | Provision for Depreciation A/c | 1,80,000 | Dec. 31 | Profit and Loss A/c                        | 1,80,000 |
|         |                                | 1,80,000 |         |  | 1,80,000 |
| 2011    |                                |          | 2011    |  |          |
| Dec. 31 | Provision for Depreciation A/c | 1,79,000 | Dec. 31 | Profit and Loss A/c<br>(55,000 + 1,24,000) | 1,79,000 |
|         |                                | 1,79,000 |         |  | 1,79,000 |
| 2012    |                                |          | 2012    |  |          |
| Dec. 31 | Provision for Depreciation A/c | 1,22,500 | Dec. 31 | Profit and Loss A/c<br>(15,000 + 1,07,500) | 1,22,500 |
|         |                                | 1,22,500 |         |  | 1,22,500 |
|         |                                |          |         |  |          |
|         |                                |          |         |  |          |

**Working Notes:**

**WN1:** 2 Trucks purchased for Rs 3,00,000 (i.e. 1,50,000 × 2) on January 01, 2010 has been sold on November 30, 2011. Therefore, depreciation on 2 trucks

for 1 year and 11 months i.e. Rs 1,15,000 [60,000 (for 2010) + 55,000 (for 2011)] is credited to Truck Account by making a debit to Provision for Depreciation Account.

**WN2: Calculation of Profit or Loss on Sale**

| <b>Particulars</b>  | <b>Amount<br/>(Rs)</b> |
|---|------------------------|
| Value of 2 Trucks Sold as on Jan. 01, 2010 (1,50,000 × 2) | 3,00,000               |
| Less: Depreciation for 1 year 11 months (60,000 + 55,000) | (1,15,000)             |
| Value of 2 Trucks on Nov. 30, 2011                        | 1,85,000               |
| Less: Sale Value  | (1,90,000)             |
| <b>Profit on Sale</b>                                     | <b>5,000</b>           |
|   |                        |

**WN3:** One Truck purchased for Rs 1,50,000 on January 01, 2010 met with an accident on July 01, 2012. It was used for 2 years and 6 months, therefore, depreciation for this period is Rs 75,000 (30,000 + 30,000 + 15,000) which has been credited to Truck Account by making a debit to Provision for Depreciation Account.

**WN4: Calculation of Profit or Loss on Destruction Due to Accident**

|  |  |
|--|--|
|  |  |
|--|--|

| Particulars  | Amount<br>(Rs) |
|--|----------------|
| Value of 1 Truck as on Jan. 01, 2010                               | 1,50,000       |
| Less: Depreciation for 2 years 6 months (30,000 + 30,000 + 15,000) | (75,000)       |
| Value of 1 Truck as on July 01, 2012                               | 75,000         |
| Less: Amount recovered from Insurance Company                      | (35,000)       |
| <b>Loss on Destruction</b>   | <b>40,000</b>  |
|  |                |

**Example 5:** On April 01, 2009 machinery was purchased for Rs 12,00,000. During the year 2012, a part machinery costing Rs 2,50,000 was damaged and disposed-off for Rs 1,13,000. Depreciation is charged @ 15% p.a. on Diminishing Balance Method. Draw up Machinery Account assuming books are closed on March 31 every year.

### ***Solution***

| Machinery Account |             |                |      |             |                |
|-------------------|-------------|----------------|------|-------------|----------------|
| Dr.               |             |                | Cr.  |             |                |
| Date              | Particulars | Amount<br>(Rs) | Date | Particulars | Amount<br>(Rs) |
|                   |             |                |      |             |                |

|         |             |           |         |                  |           |
|---------|-------------|-----------|---------|------------------|-----------|
| 2009-10 |             |           | 2009-10 |                  |           |
| Apr. 01 | Bank A/c    | 12,00,000 | Mar. 31 | Depreciation A/c | 1,80,000  |
|         |             |           | Mar. 31 | Balance c/d      | 10,20,000 |
|         |             | 12,00,000 |         |                  | 12,00,000 |
| 2010-11 |             |           | 2010-11 |                  |           |
| Apr. 01 | Balance b/d | 10,20,000 | Mar. 31 | Depreciation A/c | 1,53,000  |
|         |             |           | Mar. 31 | Balance c/d      | 8,67,000  |
|         |             | 10,20,000 |         |                  | 10,20,000 |
| 2011-12 |             |           | 2011-12 |                  |           |
| Apr. 01 | Balance b/d | 8,67,000  | Mar. 31 | Depreciation A/c | 1,30,050  |
|         |             |           | Mar. 31 | Balance c/d      | 7,36,950  |
|         |             |           |         |                  |           |

|         |             |          |         |  |          |
|---------|-------------|----------|---------|--|----------|
|         |             | 8,67,000 |         |  | 8,67,000 |
| 2012-13 |             |          | 2012-13 |  |          |
| Apr. 01 | Balance b/d | 7,36,950 |         | Bank A/c                                   | 1,13,000 |
|         |             |          |         | Profit and Loss A/c<br>(Loss- <b>WN1</b> ) | 40,531   |
|         |             |          | Mar. 31 | Depreciation A/c ( <b>WN2</b> )            | 87,513   |
|         |             |          | Mar. 31 | Balance c/d                                | 4,95,906 |
|         |             | 7,36,950 |         |  | 7,36,950 |
|         |             |          |         |  |          |

**Working Notes:**

**WN1**- Calculation of Profit or Loss on Sale of Part of Machinery

| Particulars                                     | Amount<br>(Rs) |
|---|----------------|
| Cost of Part Machinery Sold as on Apr. 01, 2009 | 2,50,000       |

|                                       |               |
|---------------------------------------|---------------|
| Less: Depreciation @ 15 % for 2009-10 | (37,500)      |
| Value as on Apr. 01, 2010             | 2,12,500      |
| Less: Depreciation @ 15 % for 2010-11 | (31,875)      |
| Value as on Apr. 01, 2011             | 1,80,625      |
| Less: Depreciation @ 15 % for 2011-12 | (27,094)      |
| Value as on Apr. 01, 2012             | 1,53,531*     |
| Less: Sale Value                      | (1,13,000)    |
| <b>Loss on Sale</b>                   | <b>40,531</b> |
|                                       |               |

**Note:** As the date of sale of part of machinery is not given, so, it has been assumed that it is sold in the beginning of the year.

**WN2- Calculation of Depreciation on Remaining Machinery for 2012-13**

| <b>Particulars</b>                          | <b>Amount<br/>(Rs)</b> |
|---|------------------------|
| Book Value of Machinery as on Apr. 01, 2012 | 7,36,950               |
|   |                        |



|  |            |
|--|------------|
| Less: Book Value of Part Machinery sold as on Apr. 01, 2012* | (1,53,531) |
|  | 5,83,419   |
| ∴ Depreciation @ 15% (5,83,419 × 15%)                        | 87,513     |
|  |            |

Remaining Value of Machinery at the end of the year = 5,83,419 – 87,513  
= **4,95,906**

**Example 6:** Jayant Ltd. bought furniture for Rs 3,00,000 on April 01, 2009. It has purchased additional furniture for Rs 1,70,000 on July 01, 2010 and for Rs 2,00,000 on February 01, 2012. On April 01, 2012 a part of furniture purchased for Rs 1,10,000 on January 01, 2009 was sold for Rs 90,000. On the same date, new furniture costing Rs 2,50,000 was purchased. Depreciation is charged at 10% on Reducing Balance Method. The firm closes its books on March 31, every year. Prepare Furniture Account for the period from 2009 to 2012.

**Solution**

| Furniture Account |               |                |         |                       |                |
|-------------------|---------------|----------------|---------|-----------------------|----------------|
| Dr.               |               |                | Cr.     |                       |                |
| Date              | Particulars   | Amount<br>(Rs) | Date    | Particulars           | Amount<br>(Rs) |
| 2009-10           |               |                | 2009-10 |                       |                |
| Apr. 01           | Bank A/c (F1) | 3,00,000       | Mar. 31 | Depreciation A/c (F1) | 30,000         |

|             |               |          |             |                  |          |          |
|-------------|---------------|----------|-------------|------------------|----------|----------|
|             |               |          | Mar.<br>31  | Balance c/d      | 2,70,000 |          |
|             |               | 3,00,000 |             |                  | 3,00,000 |          |
| 2010-<br>11 |               |          | 2010-<br>11 |                  |          |          |
| Apr.<br>01  | Balance b/d   | 2,70,000 | Mar.<br>31  | Depreciation on- |          |          |
| Jul.<br>01  | Bank A/c (F2) | 1,70,000 |             | F1               | 27,000   |          |
|             |               |          |             | F2               | 17,000   | 44,000   |
|             |               |          | Mar.<br>31  | Balance c/d      |          |          |
|             |               |          |             | F1               | 2,43,000 |          |
|             |               |          |             | F2               | 1,53,000 | 3,96,000 |
|             |               | 4,40,000 |             |                  |          | 4,40,000 |
| 2011-<br>12 |               |          | 2011-<br>12 |                  |          |          |
| Apr.<br>01  | Balance b/d   |          | Mar.<br>31  | Depreciation on- |          |          |
|             |               |          |             |                  |          |          |

|             |               |          |          |             |                  |          |          |
|-------------|---------------|----------|----------|-------------|------------------|----------|----------|
|             | F1            | 2,43,000 |          |             | F1               | 24,300   |          |
|             | F2            | 1,53,000 | 3,96,000 |             | F2               | 15,300   |          |
| Feb.<br>01  | Bank A/c (F3) |          | 2,00,000 |             | F3               | 20,000   | 59,600   |
|             |               |          |          | Mar.<br>31  | Balance c/d      |          |          |
|             |               |          |          |             | F1               | 2,18,700 |          |
|             |               |          |          |             | F2               | 1,37,700 |          |
|             |               |          |          |             | F3               | 1,80,000 | 5,36,400 |
|             |               |          | 5,96,000 |             |                  |          | 5,96,000 |
| 2012-<br>13 |               |          |          | 2012-<br>13 |                  |          |          |
| Apr.<br>01  | Balance b/d   |          |          | Apr.<br>01  | Bank A/c         |          | 90,000   |
|             | F1            | 2,18,700 |          | Mar.<br>31  | Depreciation on- |          |          |
|             | F2            | 1,37,700 |          |             | F1<br>(WN2)      | 13,851   |          |
|             | F3            | 1,80,000 | 5,36,400 |             | F2               | 13,770   |          |

|            |  |          |            |                  |          |          |
|------------|--|----------|------------|------------------|----------|----------|
| Apr.<br>01 | Profit and Loss A/c<br>(Profit- <b>WN1</b> ) | 9,810    |            | F3               | 18,000   |          |
| Apr.<br>01 | Bank A/c (F4)                                | 2,50,000 |            | F4               | 25,000   | 70,621   |
|            |  |          | Mar.<br>31 | Balance c/d-     |          |          |
|            |  |          |            | F1( <b>WN2</b> ) | 1,24,659 |          |
|            |  |          |            | F2               | 1,23,930 |          |
|            |  |          |            | F3               | 1,62,000 |          |
|            |  |          |            | F4               | 2,25,000 | 6,35,589 |
|            |  | 7,96,210 |            |                  |          | 7,96,210 |
|            |  |          |            |                  |          |          |

**Note:** The rate of depreciation is given without the words '**per annum (p.a.)**'. Therefore, depreciation on furniture is charged for the full year irrespective of the time factor.

**Working Notes:**

**WN1-** Calculation of Profit or Loss on Sale of Part of Machinery

| <b>Particulars</b>                              | <b>Amount<br/>(Rs)</b> |
|---|------------------------|
| Cost of Part Furniture Sold as on Apr. 01, 2009 | 1,10,000               |
| Less: Depreciation @ 10% for 2009-10            | (11,000)               |
| Value as on Apr. 01, 2010                       | 99,000                 |
| Less: Depreciation @ 10% for 2010-11            | (9,900)                |
| Value as on Apr. 01, 2011                       | 89,100                 |
| Less: Depreciation @ 10% for 2011-12            | (8,910)                |
| Value as on Apr. 01, 2012                       | 80,190*                |
| Less: Sale Value                                | (90,000)               |
| <b>Profit on Sale</b>                           | <b>9,810</b>           |
|   |                        |

**WN2-** Calculation of Depreciation on Remaining Furniture (F1) for 2012-13

| <b>Particulars</b> | <b>Amount<br/>(Rs)</b> |
|--------------------|------------------------|
|                    |                        |

|  |          |
|--|----------|
| Book Value of Furniture (F1) as on Apr. 01, 2012             | 2,18,700 |
| Less: Book Value of Part Furniture Sold as on Apr. 01, 2012* | (80,190) |
|  | 1,38,510 |
| ∴ Depreciation @ 10%   | 13,851   |
|  |          |

Remaining Value of Furniture (F1) at the end of the year 1,38,510 – 13,851  
= **1,24,659**