# Revision Notes

## Class - 11 Accountancy

## Chapter 7 - Depreciation, Provisions and Reserves

**Meaning:**

Depreciation is a decline in the book value of depreciable assets due to wear and tear, constant use and expiry of time during the estimated useful life of the asset.

**Causes of Depreciation**

1. By constant use.
2. By the expiry of time.
3. By accident.
4. By depletion.
5. By permanent fall in the market price.

**Importance/need of providing depreciation:-**

- For ascertaining the true profit or loss.
- For providing a true and fair view of the financial position.
- To ascertain the accurate cost of the product.
- To provide funds for the replacement of assets.
- For avoiding overpayment of income tax.

**Factors determining the amount of Depreciation:-**

1. The total cost of the asset.

2. The estimated useful life of assets.
3. Estimated scrap value.

**Methods of providing or allocating depreciation:-**

1. Straight-line method
2. Written down value method
3. Annuity method
4. Depreciation fund method
5. Insurance policy method
6. Revaluation method
7. Depletion method
8. Machine hour rate method

**STRAIGHT-LINE METHOD**

Depreciation is charged at a fixed percentage on the original cost of the asset.

The amount of depreciation remains equal from year to year and as such the method is also known as the 'Equal instalment method'.

(Accounting treatment)

Following entries are passed in this method:-

1. **Entry for purchase of asset:-**

    **Asset a/c**

    **To Bank a/c**

2. **Entry for providing depreciation at the end of each year:-**

   **Depreciation a/c**

   **To asset a/c**

3. **Entry for the amount realized on the sale of asset:-**

   **Bank a/c**

   **To asset a/c**

4. **Entry in case of loss on sale of asset:-**

   **Profit /loss a/c**

   **To asset a/c**

5. **Entry in case of profit on the sale of asset:-**

   **Asset a/c**

   **To profit and loss a/c**

**Let's practice with a question:-**

**On 1$^{st}$ April 2009, Ram glass limited purchased a machine for Rs.90,000 and spent Rs.6,000**

**On its carriage and Rs, 4,000 on its erection. On the date of purchase, it was estimated that the effective life of the machine will be 10 years and after 10 years its scrap value will be Rs.20,000.**

**Prepare machine a/c and depreciation a/c for 4 years after providing depreciation on the fixed instalment method. Accounts are closed on 31st March every year.**

**Ans:** **Machine Account**

**Dr.** **Cr.**

| Date | Particulars | Amount (in Rs) | Date | Particulars | Amount (In Rs) |
|---|---|---|---|---|---|
| 2009 | | | 2010 | | |
| April 1 | To bank a/c | 90,000 | Mar. 31 | By depreciation a/c | |
| April1 | To bank a/c(expenses) | 6,000 | | (8% on 1,00,000) | 8,000 |
| April1 | To bank a/c(expenses) | 4,000 | Mar. 31 | By balance c/d | 92,000 |
| | | 1.00,000 | | | 1,00,000 |
| 2010 | | | 2011 | | |
| April 1 | To balance b/d | 92,000 | Mar. 31 | By depreciation a/c | |
| | | | | (8% on 1,00,000) | 8,000 |

| | | | | | |
|---|---|---|---|---|---|
| | | | Mar. 31 | By balance c/d | 84,000 |
| | | 92,000 | | | 92,000 |
| | | | | | |
| 2011 | | | 2012 | | |
| April 1 | To balance b/d | 84,000 | Mar. 31 | By depreciation a/c | |
| | | | | (8% on 1,00,000) | 8,000 |
| | | | Mar. 31 | By balance c/d | 76,000 |
| | | 84,000 | | | 84,000 |
| 2012 | | | | | |
| April 1 | To balance b/d | 76,000 | 2013 | | |
| | | | Mar. 31 | By depreciation | 8,000 |
| | | | | (8%on 1,00,000) | |
| | | | Mar. 31 | By balance c/d | 68,000 |
| | | 76,000 | | | 76,000 |

| | | | | | |
|---|---|---|---|---|---|
| 2013 | | | | | |
| April 1 | To balance b/d | 68,000 | | | |
| | | | | | |

**Depreciation Account**

**Dr.** **Cr.**

| **Date** | **Particulars** | **Amount (In Rs)** | **Date** | **Particulars** | **Amount (In Rs)** |
|---|---|---|---|---|---|
| 2010 | | | 2010 | | |
| Mar.31 | To machine a/c | 8,000 | Mar.31 | By statement of P/L | 8,000 |
| | | | | | |
| 2011 | | | 2011 | | |
| Mar.31 | To machine a/c | 8,000 | Mar.31 | By statement of P/L | 8,000 |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 2012 | | | 2012 | | |
| Mar.31 | To machine a/c | 8,000 | Mar.31 | By statement of P/L | 8,000 |
| | | | | | |
| 2013 | | | 2013 | | |
| Mar.31 | To machine a/c | 8,000 | Mar.31 | By Statement of P/L | 8,000 |
| | | | | | |
| | | | | | |

**Working note:-**

As the rate of depreciation is not given in the question, the amount of the annual depreciation will be arrived at as under:

$$\text{Annual depreciation} \quad \frac{\text{Cost of the asset} \quad \text{estimated net residual value}}{\text{No. of years of expected life}}$$

$$\frac{\text{Rs.}1{,}00{,}000 \quad \text{Rs.}20{,}000}{10 \text{ years}}$$

$$\text{Rs. } 8000$$

$$\text{Rate of depreciation} \quad \frac{\text{Amount of depreciation}}{\text{Total cost of asset}} \quad 100$$

$$\frac{8{,}000}{1{,}00{,}000} \quad 100 \quad 8\%$$

## WRITTEN DOWN VALUE METHOD

Under this method, the value of assets goes on diminishing year after year, the amount of depreciation charged every year also goes on declining.

For example, if a machine is purchased for Rs.20,000 and depreciation is to be charged at 10% p.a. according to written down value method the depreciation will be charged as:

- Ist year

10% of 20,000 = 2,000

- 2nd year

20,000-2,000 = 18,000

10% of 18,000 = 1,800

- 3rd year

18,000 - 1,800 = 16,200

10% of 16,200 = 1,620

And so on…

**Let's practice with a question:-**

**Tesla traders purchased a machine on April 1, 2019, at a cost of Rs.8,000 and spent Rs2,000 on its installation. The firm writes off depreciation @10% p.a. by a written down value method. The scrap value of the plant at the end of its economic life of 4 years is expected to be Rs.6,561.**

**Show the machine account for 4 years in the books of tesla traders. The books are closed on 31 March every year.**

**Ans:**

**MACHINE ACCOUNT**

**Dr.**

| **Date** | **Particulars** | **Amount (In Rs.)** | **Date** | **Particulars** | **Amount (In Rs.)** |
|---|---|---|---|---|---|
| 2009 | | | 2010 | | |
| April 1 | To bank a/c | 8,000 | Mar.31 | By depreciation | |
| April 1 | To bank a/c(expenses) | 2,000 | | (10% on Rs.10,000) | 1,000 |
| | | | Mar.31 | By balance c/d | 9,000 |
| | | 10,000 | | | 10,000 |
| 2010 | | | 2011 | | |
| April 1 | To balance b/d | 9,000 | Mar.31 | By depreciation | |
| | | | | (10% on Rs.9,000) | 900 |
| | | | Mar.31 | By balance c/d | 8,100 |
| | | 9,000 | | | 9,000 |
| 2011 | | | 2012 | | |
| April 1 | To balance b/d | 8,100 | Mar.31 | By depreciation | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | (10% on Rs.8,100) | 810 |
| | | | Mar.31 | By balance c/d | 7,290 |
| | | 8,100 | | | 8,100 |
| 2012 | | | 2013 | | |
| April 1 | To balance b/d | 7,290 | Mar.31 | By depreciation | |
| | | | | (10% on Rs.7,290) | 729 |
| | | | Mar.31 | By balance c/d | 6,561 |
| | | 7,290 | | | 7,290 |
| 2013 | | | | | |
| April 1 | To balance b/d | 6,561 | | | |

**Difference between the straight-line method and written down value method.**

| **Basis** | **Straight-line method** | **Written down value method** |
|---|---|---|
| Amount of depreciation. | Equal depreciation is charged every year. | Depreciation goes on decreasing year after year. |

| | | |
|---|---|---|
| Basis of calculation of depreciation. | Depreciation is charged on the original cost of the asset. | Depreciation is charged on the reducing balance of the asset. |
| Zero levels. | The book value of the asset can be reduced to zero. | The book value of the asset can never be reduced to zero. |
| Approval of income tax authorities. | This method is not approved by income tax authorities. | This method is approved by income tax authorities. |

**Methods of recording depreciation:-**

- **First method:- By charging to an asset account.**
- **Second method:- By creating provision for depreciation accounts.**

**Let's practice with a question:-**

**XYZ Ltd. Purchased on April 1, 2008, a second-hand plant for Rs.4,00,000 and immediately spent Rs.80,000 for its overhauling and Rs.20,000 for its instalment. On Oct., 1,2011 the plant became obsolete and was sold for Rs.2,00,000. Depreciation is provided at 10% p.a. on the original cost method. Accounts are closed each year on 31$^{st}$ March.**

**Show necessary ledger accounts assuming that:-**

1. **Provision for depreciation account is not maintained, and**
2. **Provision for depreciation account is maintained.**

**Ans:**

1. <u>When provision for depreciation account is not maintained:-</u>

**PLANT ACCOUNT**

**Dr.** **Cr.**

| Date | Particulars | Amount (In Rs.) | Date | Particulars | Amount (In Rs.) |
|---|---|---|---|---|---|
| 2008 | | | 2009 | | |
| April 1 | To bank a/c | 4,00,000 | Mar.31 | By depreciation a/c | 50,000 |
| April 1 | To bank a/c ( expense ) | 1,00,000 | Mar.31 | By balance c/d | 4,50,000 |
| | | 5,00,000 | | | 5,00,000 |
| 2009 | | | 2010 | | |
| April 1 | To balance b/d | 4,50,000 | Mar.31 | By depreciation a/c | 50,000 |
| | | | Mar.31 | By balance c/d | 4,00,000 |
| | | 4,50,000 | | | 4,50,000 |
| 2010 | | | 2011 | | |
| April 1 | To balance b/d | 4,00,000 | Mar.31 | By depreciation a/c | 50,000 |
| | | | Mar.31 | By balance c/d | 3,50,000 |
| | | 4,00,000 | | | 4,00,000 |
| 2011 | | | 2011 | | |

| | | | | | |
|---|---|---|---|---|---|
| April 1 | To balance b/d | 3,50,000 | Oct.1 | By bank a/c | 2,00,000 |
| | | | Oct.1 | By depreciation a/c (6 m) | 25,000 |
| | | | Oct.1 | By statement of P/L (B.F.) | 1,25,000 |
| | | 3,50,000 | | | 3,50,000 |
| | | | | | |

2. When provision for depreciation account is maintained:-

**PLANT ACCOUNT**

**Dr.** **Cr.**

| Date | Particulars | Amount (In Rs.) | Date | Particulars | Amount (In Rs.) |
|---|---|---|---|---|---|
| 2008 | | | 2009 | | |
| April 1 | To bank a/c | 4,00,000 | Mar.31 | By balance c/d | 5,00,000 |
| April 1 | To bank a/c (expenses) | 1,00,000 | | | |

| | | | | | |
|---|---|---|---|---|---|
| | | 5,00,000 | | | 5,00,000 |
| 2009 | | | 2010 | | |
| April 1 | To balance b/d | 5,00,000 | Mar.31 | By balance c/d | 5,00,000 |
| | | | | | |
| 2010 | | | 2011 | | |
| April 1 | To balance b/d | 5,00,000 | Mar.31 | By balance c/d | 5,00,000 |
| | | | | | |
| 2011 | | | 2011 | | |
| April | To balance b/d | 5,00,000 | Oct.1 | By bank a/c | 2,00,000 |
| | | | Oct.1 | By provision for dep. | 1,75,000 |
| | | | Oct.1 | By statement of P/L | 1,25,000 |
| | | 5,00,000 | | | 5,00,000 |
| | | | | | |

**PROVISIONS FOR DEPRECIATION ACCOUNT**

**Dr.** **Cr.**

| Date | Particulars | Amount (In Rs.) | Date | Particulars | Amount (In Rs.) |
|---|---|---|---|---|---|
| 2009 | | | 2009 | | |
| Mar. 31 | To balance c/d | 50,000 | Mar.31 | By depreciation a/c | 50,000 |
| | | | | | |
| 2010 | | | 2009 | | |
| Mar. 31 | To balance c/d | 1,00,000 | April1 | By balance b/d | 50,000 |
| | | | 2010 | | |
| | | | Mar.31 | By depreciation a/c | 50,000 |
| | | 1,00,000 | | | 1,00,000 |
| 2011 | | | 2010 | | |
| Mar. 31 | To balance c/d | 1,50,000 | April1 | By balance b/d | 1,00,000 |
| | | | 2011 | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | Mar.31 | By depreciation a/c | 50,000 |
| | | 1,50,000 | | | 1,50,000 |
| 2011 | | | 2011 | | |
| Oct.1 | To plant a/c | | April1 | By balance b/d | 1,50,000 |
| | (Transfer to plant a/c) | 1,75,000 | Oct.1 | By depreciation a/c | 25,000 |
| | | 1,75,000 | | | 1,75,000 |
| | | | | | |

**Provision**

Provision can be described as an amount kept aside to cover a known expense/liability in the future. This is the fund that is to be put aside by a company/organisation to cover the anticipated losses in the future.

Example:-

1. Provision for depreciation.
2. Provision for bad debts.
3. Provision for discount on debtors.

**Difference between provision and reserves:**

| Basis of difference | Provision | Reserve |
|---|---|---|

| | | |
|---|---|---|
| **1. Meaning** | Provisions are created to meet a known liability. | Reserves are created to meet an unknown liability in future. |
| **2. Object** | The objective of creating provisions is to provide for depreciation and other specific liabilities. | The objective of creating reserves is to strengthen the financial position of the business. |
| **3. Mode of creation** | They are created even if there is insufficient profit. | They are created out of adequate profit only. |
| **4. Investment outside the business.** | Provision cannot be invested outside the business. | Reserves can be invested outside the business. |

**Types of reserves:-**

**Revenue reserve:** These reserves come into existence out of profit earned in the course of the day to day business operations.

- **General Reserves:-** Retained profit of the business for the uncertainties.
- **Specific Reserves:-** Reserves created for specific purposes.

**Capital reserve:** Capital reserves are created to write off capital losses and to issue fully paid bonuses among the equity shareholders.

Example:-

- Profit on sale of assets.
- Profit on redemption of the debenture.

**Provision for doubtful debts accounting treatment:-**

Profit and loss a/c   Dr.

To provision for doubtful debts

**Let's do it with an example:-**

**Question:**

| Date | Particulars | L.F | Debit | Credit |
|---|---|---|---|---|
| **1.** | **Sundry debtors** | | **58,000** | **58,000** |

**Additional information:**

- **Bad debts proved bad but not recorded amounted to Rs.8,000.**
- **Provision is to be maintained at 10% of debtors.**

**Ans:**

| Date | Particulars | L.F | Debit | Credit |
|---|---|---|---|---|
| 1. | Bad debts a/c Dr.<br>To sundry debtors a/c<br>(Bad debts written off) | | 8,000 | 8,000 |
| 2. | Profit and loss a/c. Dr.<br>To bad debts a/c<br>(Bad debts debited to profit and loss a/c) | | 8,000 | 8,000 |

| | | | | |
|---|---|---|---|---|
| 3. | Profit and loss a/c Dr.<br><br>To provision for doubtful debts a/c<br><br>(Provision for doubt debts created) | | 5,000 | 5,000 |

Working note: Calculation of provision for doubtful debts.

Provision for doubtful debts 10% on debtors,

Debtors = 58,000-8,000= 50,000

$50{,}000 \times 10/100 = 5{,}000$