**Unit – 1 Depreciation**

Accounting for depreciation – Meaning –Characteristics – Causes – Objectives – Basic factors affecting the amount of depreciation – Methods of providing depreciation – reserves and provisions

**Meaning of depreciation:**

It is evident that depreciation is the permanent and continuous decrease in the value of an asset from any cause. It differs from fluctuation which is a temporary increase or decrease in value. When a fixed asset is acquired for use in the business, its working capacity or its earning is gradually reduced. It is a fall in the value of the fixed asset.

**Definition:**

1. “Depreciation may be defined as the measure of the exhaustion of the effective life of an asset from any cause during a given period.” -Spicer and Pegler

2. “Depreciation may be defined as a gradual deterioration in value due to use.” -R. G. Williams

**Characteristics of Depreciation:**

A careful examination of various definitions of depreciation reveals the following characteristics.

1. Depreciation is calculated on the value of the depreciable assets like building, plant, machinery, furniture loose tools etc.

2. It is a permanent and continuous decreases in the value of an asset.

3. Depreciation is caused due to use, efflux of time, obsolescence etc.

4. Depreciation is charged to spread the cost of an asset over its useful life.

**Objectives of depreciation:**

**1. To compute true cost of production:** In cost terminology, overhead charges include all indirect costs. Depreciation is one among them. The asset engaged in production loses its value due to physical wear and tear. The said reduction in value of asset would be included in the cost of production. As a revenue expense its inclusion gives true cost of production.

**2. To determine correct income:** Depreciation is a charge included in the profit and loss account. True and correct profit can be arrived at only by charging depreciation. Depreciation is not visible. It is never paid to an outside party. Yet, it is desirable to charge depreciation on the fixed assets as these assets are used for earning profit. Depreciation must be deducted from the income earned to calculate a correct income.

**3. To show a true and fair view of financial position:** A [balance sheet reveals the financial position](https://accountlearning.com/details-various-items-furnished-balance-sheet/) of its entity. Fixed assets should appear in the balance at their correct value. If assets are shown without any charge for depreciation, their value would be overstated. Consequently, the balance sheet will not show the correct state of business. Assets stated at their written down value will give a correct picture.

**4. For legal compliance:** The cost of non-compliance would always be heavy. It is compulsory under the Companies Act to provide for depreciation for [dividend payment](https://accountlearning.com/rules-regarding-declaration-payment-dividend/). No dividend shall be declared or paid out of profits before depreciation. Whether profits are sufficient or insufficient for dividend payment, depreciation must be provided for. Provision for depreciation ensures that dividend is paid out of profits.

**5. To meet replacement cost:** Occurrence of depreciation is gradual and not sudden. So, ample time is available to plan for replacement of existing assets at a future date. It is wiser to replace an asset than to incur additional expenditure on its maintenance and repair. By way of provision for depreciation the initial cost of the equipment is spread equitably over its period of usefulness. Amount of depreciation gets accumulated during the asset’s working life. It provides necessary funds so that replacement can be effected without financial strain.

**6. To keep capital intact:** Keeping the capital intact has always been the focal point in business. The amount of depreciation charged against every year’s profit should be appropriate. Omission or understatement of depreciation results in inflated profit. If any dividend is distributed out of inflated profit, it would be an incorrect return on capital. It will cause the value of the business to decrease. Capital should be kept intact.

**7. To plan tax liability:** Tax planning is the legitimate right of every assessed. Depreciation can be used as a tax saving device. It is an admissible expense while computing income from business. Income tax liability is reduced by claiming depreciation. A suitable depreciation policy is always essential to minimize tax liability.

**Causes of depreciation:**

(1) Internal Causes, and

(2) External Causes.

**(1) Internal Causes:** Those causes which relate to the nature of the asset itself may be placed under this head. They are the following:

**(i) Wear and Tear:** Some assets, such as building, plant, machinery, motor, etc., decrease in value by constant use to which they are put. Although they are kept in order by providing for their repairs, the time comes when they are totally of no value.

**(ii) Exhaustion:** Assets like plantations, animals, etc., lose their value gradually with the passage of time. They have their definite become useless after the expiry of a certain fixed period.

**(iii) Depletion:** There are oil wells, mines, etc., which lose their value if the oil or mineral is extracted out of them. This is termed as ‘Depreciation by Depletion’.

**(iv) Deterioration:** Normally, depreciation by deterioration is in case of those assets. e.g., food articles, etc., which have temporary or short life. Repairs make up the loss caused by deterioration.

**(2) External Causes:** Those factors which arise from causes outside the assets are external causes. They are the following:

**(i) Effluxion of Time:**  Decrease in the value of assets, such as patents, leasehold property, etc. is caused by the effluxion of time. An asset acquired on lease becomes valueless after the expiry of the period of lease.

**(ii) Obsolescence:** Obsolescence in the loss in the value of an asset which arises out of new inventions which can produce better goods at cheaper price. Since old machines becomes out of date due to discovery of new machines and change of fashion, a businessman has to purchase the latest models and sell the old ones and thus, suffer a loss. Hence, obsolescence is totally an external factor which has no definite time of its occurrence.

**(iii) Accident:** Some assets, such as works, machines, motors, furniture, etc., become valueless due to an accident like fire, Mood or similar other havocs. These are examples of depreciation by accident.

**(iv) Permanent fall in the Market Value:** Assets like investments lose their value by a permanent fall in their market value. Actually, this is an example of permanent or temporary loss in value due to market fluctuations.

**Factors affecting the amount of depreciation:**

**1. Value of Assets:** Value of depreciable asset is the cost of the same asset that represents its money outlay or its equivalent in connection with its acquisition, installation and commissioning as well as for additions to improvements thereof. An increase or decrease in long term liability on account of exchange fluctuations, price adjustments, changes in duties or similar factors may cause changes in the historical cost a depreciable asset.

**2. Estimated working Life:** Working life is determined by

* Legal or contractual limits such as the expiry dates of related leases.
* Extraction or consumption.

Extent of use and physical deterioration on account of wear and tear which again depends upon operational factors like number of shifts for which the asset is to be used, repair and maintenance policy of the enterprise.

**3. Repairs and Renewals:** Repairs and renewals keep the assets in good working condition. A well maintained asset yields good results over its stipulated life. If it is poorly maintained, it will become useless after a short period. So, repairs and renewals are an important consideration while determining the amount of depreciation.

**4. Additions and Extensions:** Additions and extensions are normally made to existing assets like plants and buildings. The purpose is to increase their capacity. Expenditures on additions and extensions are of capital nature. The dates of incurrence of such expenditures are considered to ascertain depreciation.

**5. Residual Value:** Scrap value of an asset represents the amount which the assets will fetch when discarded. Residual or scrap value of the assets should be deducted from their original cost.

**6. Obsolescence:** An asset is likely to become outdated due to change in technology. The possibility of an asset going out of fashion should be carefully weighed while calculating the amount of depreciation.

**7. Loss of Interests:** The purchase of an asset involves a heavy sum. It may be alternatively invested elsewhere. So, capital involved in the purchase of an asset implies a loss of interest on alternative investment.

**8. Legal Requirements:** Provision for depreciation on assets is subject to the Income Tax Act and Companies Act. Their legal provisions do enter into calculation of depreciation.

**Methods of depreciation:**

**1. Straight line Method or Fixed Instalment Method or Original Cost Method:** Under this method, the same amount of depreciation is charged every year throughout the life of thee asset. The amount and rate of depreciation is calculated as under.  
  
1. Amount of depreciation = Total cost - Scrap value / Estimated life  
2. Rate of depreciation = Amount of depreciation / Original cost x 100  
  
**MERITS:  
1.Simplicity:** It is every simple and easy to understand.  
**2. Easy to calculate:** It is easy to calculate the amount and rate of depreciation.  
**3. Assets can be completely written off:** Under this method, the book value of the asset become zero or equal to its scarp value at the expiry of its useful life.

**4. Suitable for the assets having fixed working life:** This method is appropriate for the fixed assets having certain fixed period of working life.

**5. Equality of depreciation burden:**  Under this method, equal amount of depreciation is debited to the profit and loss account each year.  
  
**DEMERITS:**

**1. Ignores the actual use of the asset:** Under this method, a fixed amount of depreciation is provided on each asset by applying the predetermined rate of depreciation on its original cost.

**2. Ignores the interest factor:** This method does not take into account the loss of interest on the amount invested in the asset.

**3. Total charge on the assets will be more when the asset becomes older:** With the passage of time, the cost of maintenance of an asset goes up. Hence, the amount of depreciation and cost of maintenance put together is less in the initial period and goes up year after year.

**4. Difficulty in the determination of scrap value:** It may be quite difficult to assess the true scrap value of assets after a long period after the date of its installation.

**2. Written Down Value Method or Diminishing Balance Method or Reducing Balance Method:** Under this method, depreciation is charged at a fixed percentage each year on the reducing balance (i.e. cost less depreciation) goes on decreasing every year.  
  
**Merits:**  
**1. Uniform effect on the profit and loss account of different years:** The total charge (i.e.. depreciation plus repairs and renewals) remains almost uniform year after year, since in earlier year the amount of depreciation is more and the amount of repairs and renewals is more.

**2. Recognized by the income tax authorities:** This method is recognized by the income tax authorities.

**3. Logical Method:** It is a logical method as the depreciation is calculated on the diminished balance every year.  
  
**DEMERITS:**

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

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

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

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

**3. Annuity Method:** The annuity method considers that the business besides loosing the original cost of the asset in terms of depreciation and also loses interest. On the amount used for buying the asset. This is based on the assumption that the amount invested in the asset would have earned in case the same amount would have been invested in some other form of investment. The annual amount of depreciation is determined with the help of annuity table.

**4. Depreciation Fund Method or Sinking Fund Method:** Under this method, funds are mad available for the replacement of asset at the end of its useful life.th depreciation remains the same year after year and is changed to profit and loss account every year through the creation of depreciation fund. The aggregate amount of interest and annual provision is invested every year. When the asset is completely written off or is to be replaced, the securities are sold and the amount so realized by selling securities is used to replace the old asset.

**Merits:**

1.Financial position is not adversely affected at the time of replacement of asset due to the fact that adequate amount can be realised by the sale of depreciation fund investment.

2. The management will not be tempted to use the depreciation fund for some other purposes as it is invested in outside securities.

3. In public utilities railway companies, water, gas, electricity, fixed assets are to be shown in the balance sheet at their original value. This is possible under this method because instead of deducting depreciation from the asset concerned, it is separately shown as a liability under “Depreciation (sinking) Fund A/c”.

**Demerits:**

1.There is a risk of loss in selling the investment.

2. This method is complicated due to difficulties in realisation and re-investment of interest.

3. Profit and loss account is burdened heavily by fixed depreciation together with increasing repairs every year.

4. If the market value of investment becomes less on the date of its realisation, adequate amount will not be available for replacement of asset.

5. Every year same amount of depreciation is transferred to profit and loss account. So, the profit shown by profit & loss account is not realistic.

**5. Insurance Policy Method:** According to this method, an insurance policy is taken for the amount of the asset to be replaced. The amount of the policy is such that it is sufficient to replace the asset when it is worn out. A sum equal to the amount of depreciation is paid as premium every year. The amount goes on accumulating at a certain rate of interest and is received on maturity. The amount so received is used for the purchase of new asset, replacing the old one.

**6. Revaluation Method:** Under this method, the asset like loose tools are revalued at the end of the accounting period and the same is compared with the value of the asset at the beginning of the year. The difference is considered as depreciation.

**7. Depletion Method:** Depletion means exhaustion of natural resources. Examples: Oil wells, Mineral deposits and timber etc. Under this method, depreciation is calculated per unit of the output by dividing the total acquisition cost of asset by the number of units expected to be produced. This method is similar to production unit method.

**8. Machine Hour Rate Method:** Under this method, depreciation per machine hour is calculated. The cost of the machinery after deducting the residual value, if any is divided by the estimated working hours of the machine to find the depreciation per hour. The actual depreciation for any given period depends upon the working hours during the year.

Rate of depreciation per machine hour = Original Cost – Estimated Scrap Value / Life of the asset in hours.

**Difference between straight line method and written down value method:**

|  |  |  |
| --- | --- | --- |
| **Point of differences** | **Straight line method** | **Written down value method** |
| 1. Basis of calculation | Depreciation is calculated on the original cost of the asset for all the years. | Depreciation is calculated on the written down value of the asset year after year. |
| 2.Amount of depreciation | The amount of depreciation is the same for all the years. | The amount of depreciation goes on decreasing year after year. |
| 3.Book value of the asset at the end of its life | The book value of the asset becomes zero when there is no scrap value or is equal to its scrap value at the end of its life. | The book value of the asset never becomes zero. |
| 4.Computation of rate of depreciation | It is easy to calculate the rate of depreciation. | It is very difficult to calculate the rate of depreciation. |
| 5. Order of calculation of depreciation amount | Amount of depreciation is calculated first followed by the rate of depreciation. | Rate of depreciation is calculated first, followed by the amount of depreciation. |

**Problems:**

1. A company purchased a plant for Rs.50,000. The useful life of the plant is 10 years and the residual value is Rs.10, 000. Find out the rate of depreciation under straight line method:

**Solution:**

Amount of depreciation =Cost – Estimated Scrap Value / No. of years of expected life

= 50,000 – 10,000 / 10 years

= Rs.4,000

Rate of depreciation =Amount of depreciation / Original cost of asset \* 100

= 4,000 / 50,000 \* 100

= 8%

2. A Company Purchased Machinery for Rs. 1,00,000. Its Installation Costs amounted to Rs. 10,000. It's estimated life is 5 years and the Scrap Value is Rs. 5,000. Calculate the amount and Rate of Depreciation.

**Solution:**

Amount of depreciation =Cost of machinery + Installation cost – Estimated Scrap Value / No. of years of expected life

= 1,00,000 + 10,000 – 5,000 / 5 years

=1.05.000 / 5 yrs

= Rs.21,000

Rate of depreciation =Amount of depreciation / Original cost of asset \* 100

= 21,000 / 1,10,000 \* 100

= 19.09% or 19%

3. Ram Manufacturing Company Purchased on 1st April 2002, Machinery for Rs. 1,00,000. After having used it for three years it was sold for Rs. 85,000. Depreciation is to be Provided every year at the rate of 10% per annum on the fixed instalment method. Books are closed on 31st March Every Year. Find out the Profit or Loss on Sale of Machinery.

**Solution:**

**Calculation of profit / loss on sale of machinery:**

|  |  |
| --- | --- |
| **Particulars** | **Rs** |
| **I year:** Original cost of machinery (1.4.2002) | 1,00,000 |
| **Less:** Depreciation (1,00,000 x 10/100) | 10,000 |
|  | **90,000** |
| **II year:** 1.4.2003 | 10,000 |
|  | **80,000** |
| **III year:**1.4.2004 | 10,000 |
|  | **70,000** |
| Sale of machinery | 85,000 |
| **Profit on sale of machinery** | **15,000** |

4. A Machine Purchased on 1st July 2013 at a cost of Rs. 14,000 and Rs. 1,000 was spent on its Installation. The Depreciation is written off at 10% on the original cost every year. The books are closed on 31st December each year. The machine was sold for Rs. 9,500 on 31st March 2016. Show the Machinery A/c for all the years under Straight Line Method.

**Solution: Machinery Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 1.7.1983 | To bank A/c (14,000 + 1,000) | 15,000 | 31.12.1983 | By depreciation A/c (15,000 \*10/100 \*6/12) | 750 |
|  |  |  |  | By balance c/d | 14,250 |
|  |  | **15,000** |  |  | **15,000** |
| 1.1.1984 | To balance b/d | 14,250 | 31.12.1984 | By depreciation A/c (15,000 \*10/100) | 1,500 |
|  |  |  |  | By balance c/d | 12,750 |
|  |  | **14,250** |  |  | **14,250** |
| 1.1.1985 | To balance b/d | 12,750 | 31.12.1985 | By depreciation A/c  (15,000 \* 10/100) | 1,500 |
|  |  |  |  | By balance c/d | 11,250 |
|  |  | **12,750** |  |  | **12,750** |
| 1.1.1986 | To balance b/d | 11,250 | 31.12.1986 | By Bank (sales) | 9,500 |
|  |  |  |  | By depreciation (3 months) | 375 |
|  |  |  |  | By Profit & Loss A/c (Bal/fig)  (Loss on sale) | 1,375 |
|  |  | **11,250** |  |  | **11,250** |

5. A Company acquired a machine on 1.1.2018 at a cost of Rs. 40,000 and Spent on Rs. 1,000 on its Installation. The firm writes off depreciation at 10% on the Diminishing Balance. The books are closed on 31st Dec of each year. Show the Machinery A/c for 3 years.

**Solution:**

**Calculate the amount of depreciation**

|  |  |
| --- | --- |
| **Particulars** | **Amount** |
| Cost price (40,000 + 1,000) | 41,000 |
| **Less: Ist year depreciation (41,000 \* 10/100)** | **4,100** |
|  | 36,900 |
| **Less: IInd year depreciation (36,900 \* 10/100)** | **3,690** |
|  | **33,210** |
| **Less: IIIrd year depreciation (33,210\* 10/100)** | **3,321** |
|  | **29,889** |

**Machinery Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 1.1.88 | To bank A/c (40,000 + 1,000) | 41,000 | 31.12.88 | By depreciation (41,000 \*10/100) | 4,100 |
|  |  |  |  | By balance c/d | 36,900 |
|  |  | **41,000** |  |  | **41,000** |
| 1.1.89 | To balance b/d | 36,900 | 31.12.89 | By depreciation (36,900 \* 10/100) | 3,690 |
|  |  |  |  | By balance c/d | 33,210 |
|  |  | **36,900** |  |  | **36,900** |
| 1.1.90 | To balance b/d | 33,210 | 31.12.90 | By depreciation (33,210 \* 10/100) | 3,321 |
|  |  |  |  | By balance c/d | 29,889 |
|  |  | **33,210** |  |  | **33,210** |
| 1.1.91 | To balance b/d | **29,889** |  |  |  |

6. A Machine was acquired on 1st April 2012 at a cost of Rs. 2,70,000, the cost of installation being Rs. 30,000. It is expected that its total life will be 60,000 Hours. During 2012, it worked for 15,000 hours and during 2013 for 24,000 hours. Write up the Machinery account for 2012 & 2013.

**Solution:**

Machine hour rate = Cost of the machine / Estimated total hours of life

= 3,00,000 / 60,000

= Rs.5 per hour

**Machinery Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 1.4.2017 | To bank ( 2,70,000 + 30,000) | 3,00,000 | 31.12.2017 | By depreciation (15,000 hrs x 5) | 75,000 |
|  |  |  | 31.12.2017 | BY balance c/d | 2,25,000 |
|  |  | **3,00,000** |  |  | **3,00,000** |
| 1.1.2018 | To balance b/d | 2,25,000 | 31.12.2018 | BY depreciation (24,000 hrs x 5) | 1,20,000 |
|  |  |  | 31.12.2018 | By balance c/d | 1,05,000 |
|  |  | **2,25,000** |  |  | **2,25,000** |
| 1.1.2019 | To balance b/d | 1,05,000 |  |  |  |

7. X Limited leased on June 30, 2009 on iron ore mine for a sum of Rs. 1,00,000. It is estimated that the total quantity of ore in the mine is 20,000 tonnes. The Annual output is as Follows: 2009 - 1,000 Tonnes, 2010- 4,000 Tonnes, 2011- 3,200 Tonnes and 2012 - 4,200 Tonnes. Using the Depletion Method of Depreciation to Show the Mine A/c for the four years.

**Solution:**

Depreciation rate = Cost of Asset / Mineral to be extracted

Depreciation Rate per tonne = 1,00,000 / 20,000

= Rs.5 per tonne

**Books of X Ltd Mine Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 30.06.2009 | To Bank | 1,00,000 | 31.12.2009 | By depreciation ( 1,000 \* 5) | 5,000 |
|  |  |  | 31.12.2009 | By balance c/d | 95,000 |
|  |  | **1,00,000** |  |  | **1,00,000** |
| 1.1.2010 | T balance b/d | 95,000 | 31.12.2010 | By depreciation (4,000 \* 5) | 20,000 |
|  |  |  | 31.12.2010 | By balance c/d | 75,000 |
|  |  | **95,000** |  |  | **95,000** |
| 1.1.2011 | To balance b/d | 75,000 | 31.12.2011 | By depreciation (3,200 \* 5) | 16,000 |
|  |  |  | 31.12.2011 | By balance c/d | 59,000 |
|  |  | **75,000** |  |  | **75,000** |
| 1.1.2012 | To balance b/d | 59,000 | 31.12.2012 | By depreciation (4,200 \* 5) | 21,000 |
|  |  |  | 31.12.2012 | By balance c/d | 38,000 |
|  |  | **59,000** |  |  | **59,000** |
| 1.1.2013 | To balance b/d | 38,000 |  |  |  |

8. A firm had purchased loose tools costing Rs. 4,000 on 1st April 2000. The tools were independently valued at the end of every year and the values placed on them was under: 31.12.2000- Rs. 3,800 , 31.12.2001- Rs. 3,000, 31.12.2002- Rs. 2,400, 31.12.2003- Rs. 1,600. Find out the amount of depreciation and show the loose tools A/c from 2000 to 2003 under Revaluation Method.

**Solution:**

**Loose Tools Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 1.4.2000 | To bank | 4,000 | 31.12.2000 | **By depreciation (bal.fig)** | **200** |
|  |  |  | 31.12.2000 | By balance c/d | 3,800 |
|  |  | **4,000** |  |  | **4,000** |
| 1.4.2001 | To bank | 3,800 | 31.12.2001 | **By depreciation (bal.fig)** | **800** |
|  |  |  | 31.12.2001 | By balance c/d | 3,000 |
|  |  | **3,800** |  |  | **3,800** |
| 1.4.2002 | To bank | 3,000 | 31.12.2002 | **By depreciation (bal.fig)** | **600** |
|  |  |  | 31.12.2002 | By balance c/d | 2,400 |
|  |  | **3,000** |  |  | **3,000** |
| 1.4.2003 | To bank | 2,400 | 31.12.2003 | **By depreciation (bal.fig)** | **800** |
|  |  |  | 31.12.2003 | By balance c/d | 1,600 |
|  |  | **2,400** |  |  | **2,400** |

9. A firm purchases a 5 years lease for Rs. 80,000 on 1st January. It decides to write off depreciation on the Annuity Method, Presuming the rate of interest to be 5% per annum. The annuity tables shows that a sum of Rs. 18,478 should be written off every year. Show the lease account for 5 years. Calculations are to be made to the nearest rupee.

**Solution:**

**Lease Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| I Year Jan 1 | To Cash | 80,000 | Dec 31 | By depreciation | 18,478 |
| Dec 31 | To interest ( 80,000 \* 5/100) | 4,000 | Dec 31 | By balance c/d | 65,522 |
|  |  | **84,000** |  |  | **84,000** |
| II Year Jan 1 | To balance b/d | 65,522 | Dec 31 | By depreciation | 18,478 |
| Dec 31 | To interest ( 65,522\* 5/100) | 3,276 | Dec 31 | By balance c/d | 50,320 |
|  |  | **68,798** |  |  | **68,798** |
| III Year Jan 1 | To Cash | 50,320 | Dec 31 | By depreciation | 18,478 |
| Dec 31 | To interest ( 50,320\* 5/100) | 2,516 | Dec 31 | By balance c/d | 34,358 |
|  |  | **52,836** |  |  | **52,836** |
| IV Year Jan 1 | To Cash | 34,358 | Dec 31 | By depreciation | 18,478 |
| Dec 31 | To interest ( 34,358 \* 5/100) | 1,718 | Dec 31 | By balance c/d | 17,598 |
|  |  | **36,076** |  |  | **36,076** |
| V Year Jan 1 | To Cash | 17,598 | Dec 31 | By depreciation | 18,478 |
| Dec 31 | To interest ( 17,598\* 5/100) | 880 |  |  |  |
|  |  | **18,478** |  |  | **18,478** |

10. Rajan & Co. provides Rs. 50,000 annually towards provision for Repairs and Renewals. On 1.1.2001 the provision account showed a balance of Rs. 38,000. Actual Repairs for three accounting years 2001, 2002 and 2003 were as follows: 2001- Rs. 42,000; 2002- Rs. 46,000; 2003 - Rs. 69,000. Draw up the provision for Repairs & Renewals A/c for all the 3 Years.

**Solution: Provision for Repair and Renewal Account**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date** | **Particulars** | **Amount** | **Date** | **Particulars** | **Amount** |
| 1.1.91 | To repair A/c | 42,000 | 1.1.91 | Balance b/d (bal.fig) | 30,000 |
| 31.12.91 | To balance c/d | 38,000 | 31.12.91 | By profit & loss A/c | 50,000 |
|  |  | **80,000** |  |  | **80,000** |
| 1.1.92 | To repair A/c | 46,000 | 1.12.91 | By balance b/d | 38,000 |
| 31.12.92 | To balance c/d | 42,000 | 31.12.91 | By profit & loss A/c | 50,000 |
|  |  | **88,000** |  |  | **88,000** |
| 1.1.93 | To repair A/c | 69,000 | 1.1.93 | By balance b/d | 42,000 |
| 31.12.93 | To balance c/d | 23,000 | 31.12.93 | By profit & loss A/c | 50,000 |
|  |  | **92,000** |  |  | **92,000** |
|  |  |  | 1.1.94 | By balance b/d | 23,000 |

**Reserves and Provisions:**

**Provisions:**

• Provision is to be made is respect of a liability, which is certain to be incurred, but its accurate amount is not known.

• It is charged in the Profit and loss Account on estimate basis. It should be clearly understood that if the amount of a known liability can be determined with reasonable accuracy, it can not a provision.

Examples of Provisions: Provision for Depreciation on assets, Provision for Repairs and Renewals of assets. Provision for Taxation, Provision for Discount on Debtors, Provision for Bad and Doubtful Debts.

**Reserves:**

• Reserves are the amount set aside out of profits. It is an appropriation of profits and not a charge on the profits.

• The amount of profit retained is used in the business when difficult time comes. Since reserves are neither expenses nor losses, so these are not charged to profit & loss Account rather these are debited to Profit & Loss Appropriation Account which is prepared after Profit and Loss Account.

• Reserves are also known as ‘Plough Back of Profits’.

• Reserves are created to strengthening the financial positions of the business enterprise.

• If the amount of reserve is invested outside the business then, it is called ‘Reserve Fund’.

• Creation of reserve does not reduce the not profit but only reduced the divisible profits.

**DIFFERENCE BETWEEN PROVISIONS AND RESERVE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Basis** | | **Provision** | **Reserve** |
| 1. | Meaning | It is created to meet a known liability | It is created to strengthen the financial position of business enterprise |
| 2. | Charge or  Appropriation | Provisions are charge against profits | Reserve is an appropriation of profit. |
| 3. | Objective | The object is to provide for known liability cannot be calculated accurately | It is created to strengthen the but financial position and to meet unforeseen liability |
| 4. | Effect on Profit & Loss A/c | It is debited to the Profit Hence, profit is reduced. | Reserve reduces divisible profits. |
| 5. | Creation | Provisions are to be created even if there are insufficient profits | Reserve is created out of adequate are profits only |
| 6 | Mode of creation | Provisions are created by debiting the Profit & loss account | It is created through Profit & Loss  Appropriation Account |
| 7 | Investment | It cannot be invested outside the business | Reserve can be invested outside the business |
| 8 | Necessity | Creation of provision is necessary as per law | Its creation is not necessary. It is created as a matter of prudence |

**Types of reserves:**

**I. Capital Reserve:**

a. Capital redemption reserve

b. Securities premium.

c. Profit prior to incorporation.

d. Revaluation reserve

e. Development rebate reserve

**II. Revenue Reserve**

a. Profit and loss account

b. General reserve

c. Specific reserve

d. Secret reserve

**I. Capital reserve:** It is usually created out of capital profits which are not earned in the normal course of business. They are not used for payment of dividend, though some of them are available for dividend with certain restrictions.

**II. Revenue Reserve:** It is created out of revenue surplus and it is available for distribution as dividend to the shareholders.

**(a) Profit and loss account:** This is the balance left in profit and loss appropriation account after providing for transfer to specific reserves, general reserves and dividends. The profit and loss balance is absolutely without restrictions and is available to the management of a business to utilize for any purpose.

**(b) General reserve:** It is created for any unforeseen contingencies and strengthens the financial position of the firm. Usually a specific percentage of profits are transferred t general reserve out of the current year net profit. It is like a cushion to face the ups and downs in the profitability of business firms.

**(c) Specific Reserve:** It is created for specific future contingencies or expected repayment of liabilities etc. They are also created by debiting the profit and loss appropriation account. These reserves are usually used for the purpose for which they are created through the management can driven any portion of them if necessary.

**(d) Secret reserve:** A reserve whose existence is not disclosed on the face of a balance sheet is called a secret reserve. When secret reserve exists, the financial position of the business is better than what is disclosed by the balance sheet. The Companies Act 1956 which requires the financial statements to reflect a true ad fair view of the financial position of a company impliedly prohibits creation of secret reserve.

**Merits of secret reserves:**

1. Dividends can be maintained with the use of secret reserves even when profits are fluctuating.

2. Working capital position and general financial strength improves through secret reserves without the knowledge of the shareholders or the general public.

3. In lines of business where profit margin is high, secret reserves can be hide the extent of margin to discourage competitors.

**Demerits of secret reserve:**

1. It diminishes the profits available for dividends which may deny the shareholder their legitimate due.

2. Insider trading may be encouraged due to lower value of the company’s shares in stock markets because of no disclosure of real financial strength of the company.

3. It may be harmful to the interests of employees, customers and tax revenues of the government.

4. Declining position of a company may be concealed by its management through secret reserves created in the past. This may misguide the investors.

5. The prime object of balance sheet i.e showing true and fair view of the financial position of a business is defeated through secret reserves.

**Difference between capital reserve and revenue reserve**

|  |  |  |
| --- | --- | --- |
| **Points of difference** | **Capital Reserve** | **Revenue Reserve** |
| Definition | It is created to finance long term projects for a business. | It is created to meet unforeseen events in a business organisation. |
| Revenue source | To meet the specific purpose of meeting the accounting principles | To be used as reinvestment for company. |
| Tenure | It can be used for long term projects. | It can be used for short term purpose. |
| For dividend payout | It cannot be distributed as dividend | It can be used for dividend payout. |
| Example | It is created by sale of fixed assets. | It is created from retained earnings. |