

Adjustments of accounts (Year – end adjustments)

Adjustment of some accounts is need before the preparation of the financial statements. The major adjustments include provision for bad debts, provision for depreciation, incomes and expenses. You make these adjustments in the work sheet. After incorporating the adjustments in the trial balance, the financial statements are prepared.

Why is the adjustment necessary?

Profit for the period

The profit or loss of a business is calculated by deducting the expenses incurred within a defined period from the income earned within that same period. The accountant is concerned with income earned and expenditure incurred during the period and not the receipts and payments actually made.

The matching concept

The adjustments for accruals and prepayments are the result of applying the matching principle. You should recall that this states that cash received and cash paid should be adjusted for any part period that does not relate to the overall period in question.

Accruals and Prepayments:

When the income statement is being prepared for a specific period, we must bring into account:

- a) All expenses relating to that period whether we have actually paid them or not.
- b) All items of income and gains whether we have actually received them or not.

For this purpose, some adjustments are needed at the end of the accounting period relating to:

Accrued expenses: These are expenses, which are outstanding and have not yet been paid. In order to ensure that the full expenses of the period have been included in the income statement, the accountant must ensure that the expense accounts include not only those items that have been paid for during the period but any outstanding amounts

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By Zulaika Nakabuye (CPA)

due for expenses. Accrued expenses appear as current liabilities in the balance sheet.

Total expenses incurred = expenses paid Plus accrued expenses

The accounting entry is as follows;

Dr. Income statement or respective expense account

Cr. Accrued expense account

Illustration: Salaries and wages paid during the year amounted to Shs 6,200,000. Accrued wages as at 31st December amounted to Shs 250,000. Prepare an extract of the income statement and the balance sheet.

Salaries and wages paid:

Dr. Salaries and wages 6,200,000

Cr. Cash/bank 6,200,000

Accrued salaries and wages:

Dr. Salaries and wages 250,000

Cr. Accrued Salaries and wages 250,000Current liability

Total expenses 6,200,000 plus 250,000 = 6,450,000

Income Statement (extract)

Salaries and wages:

Paid: 6,200,000

Add: accrued 250,000 6,450,000

Balance Sheet (extract)

Current liabilities:

Accrued salaries and wages: 250,000

Prepaid expenses: These are expenses, which have already been paid but relate to the following accounting period or the normal operating cycle. As well as ensuring that all of the expenses incurred in the period appear in the income statement, the accountant must also ensure that items of expense that relate to future periods, but have already been paid for, are separated.

Prepaid expenses appear as current assets in the balance sheet. Accounting entry is as follows;

Dr. Prepayments account.

Cr. Income statement or **Respective expense account**

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Illustration: Insurance paid during the year amounted to Shs 380, 000 of which UGX.120, 000 was prepaid as at 31/12. Show the entries as are necessary to bring this sum into account.

Journal entries

Dr. Prepayments account	120,000 (CA)
Cr. Income statement or Respective expense account	120,000

Income statement (extract)

Insurance:

Paid:	380,000	
Less: Prepaid	<u>120,000</u>	260,000

Balance sheet (extract)

Current assets:

Prepaid insurance: 120,000

Accrued income: This is income relating to the current accounting period or operating cycle but has not yet been received. Accrued income is presented as a current asset in the balance sheet. Accounting entry is as follows;

Dr. Accrued income account...current asset
Cr. Income statement or Respective income/gain account

Illustration: Rent received during the year amounted to Shs 650, 000. Accrued or owed rent as at 31/12 amounted to Shs 70, 000. Show the entries as are necessary to bring this sum into account.

Income statement (extract)

Rent income earned:

Received:	650,000
Add: Accrued	<u>70,000</u>
	720,000

Balance sheet (extract)

Current assets:

Accrued rent/rental income receivable: 70,000

Income in advance / prepaid income – This is income which has already been received but relates to the following accounting period or operating cycle. Prepaid income is treated as current liabilities in the balance sheet.

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By Zulaika Nakabuye (CPA)

Accounting entries is as follows;

Dr. Income statement/ Respective income account

Cr. Income in advance/ prepaid income account

Illustration: Rent received during the year amounted to Shs 800, 000 of which Shs 80, 000 was received in advance as at 31/12. Show the entries as are necessary to bring this sum into account.

Dr. Cash/Bank 800,000

Cr. Rent Income 800,000

Rent received in advance

Dr. Rent income 80,000

Cr. Prepaid rent income 80,000Current Liability

Income statement (extract)

Rent income earned:

Cash/Bank: 800, 000

Less: Rent in advance 80,000

720,000

Balance sheet (extract)

Current liabilities:

Rent in advance: 80,000

Reserves: These are those amounts, which are set aside out of profits to retain assets in the business. The motive may be to strengthen the financial position of the business.

The Amounts transferred to reserves are treated as under:

Capital components for a company includes; Share capital, Share premium, Retained earnings or accumulated profits, and Reserve for example, General reserves, revaluation reserves

Journal/Accounting entry is as follows;

Dr. Income statement account

Cr. Reserves account

More specifically, however, these amounts are shown as appropriations within equity as shown in the statement of changes in equity.

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Provisions

Are those amounts which are set aside of profits for a specific purpose. For example;

- a) Provision for bad debts,
- b) Provisions for discounts allowed or received
- c) Provisions for depreciation, etc.

These provisions are made in view of some expected events. Any expected future loss relating to the current accounting period must be charged to the income statement of the current year.

Bad debts: Debts due from debtors are shown as an asset. When a debt becomes irrecoverable, it must be written off as bad debt; otherwise, the balance sheet will not show a true and fair view of receivables/debtors. Actually if a debt is considered uncollectible then it would be prudent to remove it totally from the accounts and to charge the amount as an expense to the income statement. The original sale remains in the books as this did actually take place. The debt is however removed as it is now considered that the debt will never be paid and an expense is charged to the income statement. This bad debt is regarded as a loss to the business.

We treat this as under (recognition):

Dr. Bad debts written off account
Cr. The Receivables/debtors account.

At the end of the year:

Dr. Income statement
Cr. Bad debts written off account

These entries effectively close the Bad debts written off account, create a charge to the income statement and the Receivables/debtors restated to a recoverable figure (net).

Illustration: As at 31 December, Shs 200, 000 owing from P. Bush was written off as bad debt. Show the necessary entries in the ledger accounts.

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Journal entries:

Debit: Bad debts w/o 200,000 Credit: Trade Receivables a/c 200,000

P.Bush

(Receivables a/c)	
Dec 31 Bal b/f	200,000
	31-Dec
	B/debts W/O 200,000
	200,000
	200,000

Bad debts written off account	
De 31 P Bush 200,000	31-Dec
	Income statement
	200,000
	200,000

Bad debts recovered: Bad debts written off in the previous accounting periods may be recovered at a later stage in some cases. In other words there is a possible situation where debt is written off as bad in one accounting period, perhaps because the debtor has been declared bankrupt, and the money, or part of the money, due is then unexpectedly received in a subsequent accounting period. These recovered bad debts are regarded as gain and are treated as under:

Step 1: Reinstate the debtor:

Dr. Receivables/debtors

Cr. Bad debts recovered (other incomes in the profit/loss)

Step 2: Record the receipt of cash or cheque:

Dr. Bank Account

Cr. Receivable/Debtors

Note that this is the usual entry for cash received from a customer.

This double entry may be simplified to:

Dr. Cash Account

Cr. Bad Debts Recovered Account

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As the debit entry and credit to the receivables account cancels out each other. However, it may be useful to pass the transaction through the customer's account so that the fact that the debt was eventually paid, or partly paid, is recorded there.

Step 3

Dr. Bad debts recovered account

Cr. Income statement

This last entry effectively closes the Bad debts recovered account and recognizes income in the income statement.

Note: In examinations, it is possible to circumvent the above steps by simply:

Dr. Bank/cash

Cr Income statement

As these will be the only accounts whose balances will be affected.

Provision for bad and doubtful debts: It is a matter of common experience that some part of debts outstanding at the last date of the accounting period becomes irrecoverable later. In other words, a doubtful debt is one about which there is some cause for concern but which is not yet definitely irrecoverable. Therefore, although it is prudent immediately to recognize the possible expense of not collecting the debt in the income statement, it would also be wise to keep the original debt in the accounts in case the debtor does in fact pay up. This is achieved as below.

The anticipated loss must be also taken into account for the computation of correct amount of net profit. For this purpose, a provision for bad and doubtful is created and it is charged to the income statement. This provision is credited to the provision for bad debts account and is shown as a deduction from Total receivables/debtors in the balance sheet. The provision for Bad debts may be computed in the following two ways.

- i. Anticipated bad debts may be added up to a total figure for the provision for bad debts.

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- ii. A specific percentage of total receivables/debtors may be computed to get the provision figure. This percentage depends upon debts not recovered in the previous periods and it will be different for different firms.

The provision for bad debts is adjusted at the end of every year according to the total amount owing from debtors. The creation of a provision for bad debts does not affect the personal accounts of the debtors, since these debts have not yet become irrecoverable. The following entries are made in this case:

Provision for bad debts:

- (i) On creation;

Dr. Bad and doubtful debts expense
 Cr Provision for bad debts account

- (ii) To Increase:

Dr. Income statement (with increase)
 Cr. Provision for bad debts account

- (iii) To decrease:

Dr. Provision for bad debts account
 Cr. Income statement (with the decrease) (decrease in provision for bad debts constitutes other incomes)

Example: Trial balance: Debtors at Shs 5,000; Provision for Bad debts 2,000; Bad debts Shs 1,200;

Additional notes: 20% of trade debtors are expected to default; a provision against bad debts needs to be made.

Closing balance of provisions = $20\% * 5,000 = 1,000$

Decrease in provisions;

Debit: provision for bad debts 1,000

Credit: decrease in provision for B. debts 1,000 (Other Incomes)

Provisions for B. debts

Decrease in provisions	1,000	Bal b/f	2,000
Bal c/d	1,000		
Total	2,000	Total	2,000

In case of an increase to 50% of debtors;

Closing balance = 2,500

Increase in provisions

Debit: Bad debts expense a/c 500

Credit: Provisions for Bad debts 500

Bad debts in income statement = (1,200 Plus 500)

Provision for bad debts (Balance sheet) = (2,000 +500) = 2,500

Balance sheet:

Current Assets:

Trade debtors (5,000 – 2,500) 2,500

Depreciation:

All Tangible non-current assets except land depreciate. Depreciation is defined as the allocation of cost of the depreciable amount of a tangible non-current asset to the years in which benefit is expected from the use of that asset. ('Depreciable amount' means book value less residual value). IAS 16: Property, plant and equipment; requires the depreciation method used to reflect the pattern in the asset's economic benefits are consumed by the enterprise.

At the end of the year, depreciation must be provided on Tangible non-current assets.

Dr. Depreciation expense account

Cr. Accumulated/provision for/aggregate depreciation account

At the end of the operating cycle/financial year,

Dr. Income statement (with the depreciation expense)

Cr. The asset account (with the aggregate depreciation)

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Note: This entry is necessary as far as it is necessary to comply with the requirements of IAS 16: *Tangible non-current assets* to show the net book value of the asset in question.

Proposed Dividends:

Dividends are a reward to Shareholders. If profits are made, some of it must be appropriated to shareholders as dividends. Where dividends have been proposed after the balance sheet date, then only disclosure as a note to financial statements is required. This is only necessary to comply with IAS 10: Events after the balance sheet. However, where the dividends are proposed before the balance sheet date, then an obligation exists at the balance sheet date and a provision that becomes a liability as per IAS 37 is required. Thus;

Dr. Income statement Appropriation account (proposed dividend)

Cr. Dividends payable (Balance sheet item)

NON - CURRENT ASSETS ACQUISITION, DEPRECIATION, AND DISPOSAL

Introduction

A tangible non-current asset is acquired for use within a business with a view to earning profits. Its life extends over more than one accounting period, and so it earns profits over more than one period.

With the exception of land held on freehold or very long leasehold, every tangible non-current asset eventually wears out over time. Machines, cars and other vehicles, fixtures and fittings, and even buildings do not last forever. When a business acquires a non-current asset, it will have some idea about how long its useful life will be, and it might be decided either;

- To keep on using the asset until it becomes completely worn out, useless, and worthless; or
- To sell off the non-current asset at the end of the useful life, either by selling it as a second-hand item or as scrap – this gives rise to the idea of disposal of the non-current assets

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By Zulaika Nakabuye (CPA)

Since Non-current asset has a cost, and a limited useful life, and its value eventually declines, it follows that a charge should be made in the income statement to reflect the use that is made of the asset by the business. This charge is called depreciation.

Definition of Depreciation:

There are as many definitions of depreciation as almost the authors in accounting, nevertheless the following need emphasis.

Depreciation is the allocation of the depreciable amount of an asset over its estimated useful life.

- It is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, efflux ion of time or obsolescence through technology and market changes.
- It is the allocation of the cost of the asset to the years in which benefit is expected from its use. It is a method of spreading the loss in value of a capital asset over several periods.

Depreciation is commonly defined as wear and tear, but in accounting this definition is inadequate or inappropriate because wear and tear is just one of the causes of depreciation. Some terms such as depletion, amortization etc. may sometimes be used instead of depreciation. Note that some intangible assets such as patent, copyright, trademark goodwill etc also do lose value except that different terms other than depreciation are used for the loss of their value for stance amortization of goodwill.

For simplicity in accounting, depreciation of capital assets is usually determined at the close of each fiscal year and the depreciation expense(a portion of the expired cost of the asset) for the accounting period is charged to Income statement in accordance with the matching concept.

Important Definitions, Terms and Issues in Depreciation

There are some important definitions, terms and issues that need to be grasped at this stage to enhance the understanding of the subsequent contents in this Topic. They include but are not limited to the following.

- 1. Depreciable assets.** These are assets which are expected to be used during more than one accounting period with a limited useful life and are held by an enterprise for use in the production or supply of goods and services, for rental to others, or for administrative purposes and not for the purpose of sale in the ordinary course of business.
- 2. Useful life.** This is either the period over which a depreciable asset is expected to be used by the enterprise, or the number of production or similar units expected to be obtained from the use of the asset by the enterprise. It is also called the life span of the asset.
- 3. Depreciable amount.** Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statements, less the estimated residual value.
- 4. Historical cost.** Historical cost of a depreciable asset represents its money outlay or its equivalent in connection with its acquisition, installation and commissioning as well as additions to or improvements thereof. Capital assets are recorded at historical cost or, if donated, at their estimated fair market value.
- 5. Residual value.** This is the net amount, which the enterprise is expected to obtain from an asset at the end of its useful life after deducting the expected costs of disposal. It is otherwise called the **scrap value** or the **residual** value or the **salvage** value.
- 6.** All non-current assets (fixed assets) other than land depreciate to zero or almost zero book values. Normally land and some types of improvements on it are not depreciated because in most cases do not deteriorate due to use and the passage of time.
- 7.** Some intangible assets such as patent, copyright, trademark, goodwill, mineral resources etc do lose value except that different terms other than depreciation are used for the loss of their value for instance amortization of goodwill depletion of the resources etc.

Consistency and Disclosure Requirements

Once a depreciation method is selected for a particular asset, it becomes an accounting policy. It is a requirement that it should be used consistently and that similar items are treated using a similar method.

The method of depreciation should be applied consistently so as to enhance the comparability of the results of the operations of the enterprise from period to period.

Changing depreciation methods is discouraged as it creates distortions in financial reporting, nevertheless a change from one method can be made only if the adoption of such a method is required by statute or for compliance with an accounting standard or if it is considered that the change would result in a more appropriate preparation or presentation of the financial statements of the enterprise, but even then the effect of such a change on the reported net profit and balance sheet position must be disclosed.

It is pertinent to note that a change in the method of depreciation is treated as a change in an accounting policy and therefore should be disclosed accordingly.

It is a requirement that the depreciation methods used, the total depreciation for the period for each class of assets, the gross amount of each class of depreciable assets and the related accumulated depreciation be disclosed in the financial statements along with the disclosure of other accounting policies. But depreciation rates or the useful lives of the assets are disclosed only if they are different from the principal rates specified in the statute governing the enterprise.

Capital Expenditure and Revenue Expenditure Distinguished

It is very important to make a distinction between capital expenditures and revenue expenditures for depreciation purposes because capital expenditures are depreciated whereas revenue expenditures are not.

Capital expenditure is simply defined as that expenditure incurred in acquiring a fixed asset. This also includes the expenditure that lengthens the life span of an asset and improves the efficiency and ability of the asset to earn more income. Such an expense is debited to the appropriate fixed asset account i.e. such expenditure is capitalized.

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Any addition or extension to an existing asset which is of a capital nature and which becomes an integral part of the existing asset is depreciated over the remaining useful life of that asset. Examples of capital expenditure include: Purchase of machines; Installation costs; Freight costs incurred in transporting a fixed asset; Building an extension to a house; Trial runs, and Commissioning.

Revenue expenditure on the other hand, is that expenditure that is incurred in the maintenance and repair of fixed assets and operating expenditures necessary to carry on the business e.g. rent, rates, salaries and wages etc.

Note that revenue expenditure does not increase the value of the asset of a business and therefore cannot be depreciated but rather is debited to appropriate expense account and written off at the end of the accounting year in the profit and loss account.

Reasons for Providing For Depreciation

- Depreciation is a cost that has to reduce profits. If depreciation is not provided for, income will be overstated and tax liability is also overstated. Therefore since fixed assets are used to generate revenue it follows that the part of the cost of the asset used in earning that revenue should be charged to the profit and loss account so as to get a realistic figure of net profit.
- To portray a true and fair view of the state of affairs of a business by subtracting the accumulated depreciation from the cost of the asset. This enables disclosure of book values in the balance sheet to be fairly accurate.
- It guides policy for planning maintenance and replacement of the assets

Factors Considered In Determining/Calculating Depreciation

The assessment of depreciation and the amount to be charged in respect thereof in an accounting period are usually based on the following three factors:

1. The historical cost of the asset or any other amount substituted for the historical cost of the depreciable asset when the asset has been revalued. The historical cost includes the purchase cost plus transportation costs, installation costs, taxation, trial runs and all other costs that put the asset in a serviceable or **usable state** and therefore which should be capitalized.

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2. Estimated salvage/scrap/residual value. This is the estimated amount that the owner of the fixed asset expects to recover at the time of disposing off the asset less any cost of disposal.

3. Estimated useful life. This is the estimated time period during which benefit or service is expected from use of a non-current asset. Such an estimated time period is often in form of years however it can also be in terms of months, hours, units of production etc.

Causes of Depreciation

1. Physical deterioration

a) Wear and tear: This refers to the wearing out of fixed assets after having been in use for a number of years.

b) Rust, rot and decay: Materials in vehicles or machines eventually rust, wood eventually rots or decays after having been used for some time hence depreciation of that asset.

c) Accidents; may cause depreciation of fixed assets through physical damage say by fire, explosion etc.

2. Economic factors

Obsolescence: This refers to the fixed assets becoming outdated. E.g Due to changes in technology. E.g. typewriters have been depreciated by computers, record players by radio cassettes or CD players etc. Since they are out dated, they are no longer useful.

Inadequacy: This arises when an asset is no longer used because of the growth or changes in the size of the firm.

Methods of Computing Depreciation

There are various methods of calculating depreciation and the method employed may vary from one asset to another. The depreciation method chosen by management depends on the company's policy and its relevancy to the asset in question.

When a method is selected for a particular asset, it should be used consistently and similar items should be treated using a similar method i.e. in accordance with the consistency concept (as already seen).

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Changing methods is discouraged as it creates distortions in financial reporting, nevertheless where change is justifiable, the effect of the change on the reported net profit and balance sheet position must be disclosed as earlier discussed.

The following methods may be used for computing depreciation;

- Straight-line method (SLM)/Fixed installments method.
- Reducing balance method (Diminishing balance method)
- Sum of years' digits method
- Units of output method
- Hourly rate method
- Revaluation method

Straight Line Method (SLM)

This is otherwise called fixed installments method or fixed percentage method. It is the simplest and most widely used method. It is based on the simple average principle. i.e. it involves dividing the total cost by an estimate of how many years we think the asset will remain usable and apply the result year in year out.

We also need to estimate any residual or salvage value that we can reclaim at the end of the asset's working useful life. This method is especially good for assets that are used uniformly from year to year. However it is not realistic by assuming constant depreciation over the lifetime of an asset. It is given as:

$$\text{Depreciation per annum (p.a)} = \frac{\text{Cost} - \text{Scrap/salvage/residual value}}{\text{Estimated Number of years of useful life}}$$

For example, it is 1/1/2019 and we have just bought a new asset for Shs 100,000 that we estimate will have a useful life of 5 years; and that we think we will be able to dispose of for Shs 20,000.

Required:

- a) Calculate the annual depreciation provision for the asset.
- b) Show the depreciation schedule for this asset.

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Solution

$$\begin{aligned} \text{Depreciation per annum (p.a)} &= \frac{\text{Cost} - \text{Scrap/salvage/residual value}}{\text{Estimated Number of years of useful life}} \\ &= \frac{(100,000 - 20,000)}{5} \\ &= 16,000 \text{ per year} \end{aligned}$$

Debit: depreciation expense a/c

Credit: Accumulated depreciation a/c

Depreciation Schedule:

YEAR	Depreciation expense	Accumulated Depn	Net Book Value (cost - acc dep)
1	16,000	16,000	84,000
2	16,000	32,000	68,000
3	16,000	48,000	52,000
4	16,000	64,000	36,000
5	16,000	80,000	20,000

Example:

Equipment was purchased from England to Namanve at CIF value of Shs 10,000,000. The installation cost was Shs 2,000,000 while trial runs and commissioning amounted to Shs 2,600,000. The equipment is expected to be useful for 6 years after which it is estimated to have a salvage value of Shs 2,600,000.

Required: Calculate the depreciation expense for each year and accumulated depreciation up to Year 6.

Solution

Calculation of the cost of the equipment;

Cost up to Namanve (CIF)	10,000,000
Add installation cost	2,000,000
Trial runs and commissioning	<u>2,600,000</u>
Total cost of the equipment	<u>14,600,000</u>
Salvage value	2,600,000
Number of years of useful life=	6 years

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Depreciation expense p.a. = $\frac{\text{Cost} - \text{Salvage/Scrap/residual value}}{\text{Estimated Number of years of useful life}}$

$$\Rightarrow \frac{14,600,000 - 2,600,000}{6} = \text{Shs } 2,000,000$$

Depreciation Schedule

YEAR	Depreciation expense	Accumulated Depreciation	Net Book Value (Cost – acc dep)
1	2,000,000	2,000,000	12,600,000
2	2,000,000	4,000,000	10,600,000
3	2,000,000	6,000,000	8,600,000
4	2,000,000	8,000,000	6,600,000
5	2,000,000	10,000,000	4,600,000
6	2,000,000	12,000,000	2,600,000

Note that depreciation p.a can be expressed as a percentage of depreciable cost as follows: depreciable cost = cost – salvage/scrap value= 14,600,000 – 2,600,000

$$\frac{2,000,000}{12,000,000} \times 100 = 16.667\%$$

SLM = DEPRECIATION RATE * COST

Reducing Balance Method

This is otherwise called diminishing or declining balance method. Under this method, more depreciation is allocated to the earlier years than to later years of the asset i.e. depreciation charge or allocation reduces as the asset gets older.

- This method is suitable for assets that are more useful in earlier years than in later years like automobiles. Under this method depreciation charge is on the book value at the beginning of the year and not the original cost. This method has two types:
 - Normal reducing balance method
 - Double declining balance method

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Normal Reducing Balance Method

Under this method, annual depreciation is calculated as;

Depreciation p.a = Book value x Depreciation percentage

$$= (Cost - Accumulated depreciation) \times Depreciation percentage$$

But depreciation percentage = $(1 - \sqrt[n]{\frac{R}{C}}) \times 100\%$

Where: n = estimated number of useful life

R = Residual or scrap value

C = Cost

Example

For an asset costing Sh1, 000,000 with a 5-year life and small residual value (say Shs 30,000)

n = 5 years

C = shs 1,000,000

R = shs 30,000

$$\text{Depreciation rate} = (1 - \sqrt[5]{\frac{30}{1,000}}) \times 100\% = \text{approx } 50\%$$

To prove that the rate is 50% you will need a scientific calculator or a suitable computer package.

Calculation of reducing balance depreciation: COST = 1,000,000

Year	Annual Depn	Accumulated Depn	Net book value at end
	<i>50% of Cost/NBV</i>	<i>(Shs)</i>	<i>(Shs)</i>
1	500,000	500,000	500,000
2	250,000	750,000	250,000
3	125,000	875,000	125,000
4	62,500	937,500	62,500

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5	31,250	968,750	31,250 Scrap value (30,000)
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DOUBLE DECLINING BALANCE METHOD

Under this method depreciation percentage is got by doubling the rate (Depn %ge) on Straight Line method i.e. Depn percentage = 2 x Depreciation percentage using Straight-Line Method (SLM)

Remember:

$$\text{Depn. Rate (SLM)} = \frac{\text{Depn. Expense p. a}}{\text{Depreciable cost}} \times 100$$

However; Depreciable cost = Cost – Salvage value.

Sum of Years' Digits Method

Under this method, depreciation is computed by dividing the number of years remaining in the useful life of the asset (counting from the beginning of the year) by the sum of years of useful life. The rate of depreciation got is then multiplied by the depreciable cost (Cost – Salvage value).

$$\text{Depn. Expense} = \frac{\text{Remaining useful life (Years)}}{\text{Sum of years' digits}} \times \text{Depreciable cost}$$

Example:

An equipment was bought at a cost of Shs 50,000,000. It has an estimated useful life of 5 years at the end of which the residual value is estimated to be Shs 5,000,000.

Required: Calculate the depreciation expense for each year using the sum of years' digits method.

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

Solution: depreciable cost = (50,000,000 – 5,000,000) = 45,000,000

<i>Year</i>	<i>Depreciation rate</i>	<i>Depreciation Expense</i>	<i>Accum Depn</i>	<i>NBV</i>
1	$\frac{5}{1+2+3+4+5} = 5/15$	$(5/15) \times 45,000,000$ 15,000,000	15,000,000	35,000,000
2	4/15	$(4/15) \times 45,000,000$ 12,000,000	27,000,000	23,000,000
3	3/15	$(3/15) \times 45,000,000$ 9,000,000	36,000,000	14,000,000
4	2/15	$(2/15) \times 45,000,000$ 6,000,000	42,000,000	8,000,000
5	1/15	$(1/15) \times 45,000,000$ = 3,000,000	45,000,000	5,000,000

NOTE: Reducing balance method and sum of years' digits method are called accelerated depreciation methods because higher depreciation charges or allocations are made in the earlier years than in the later years. These two methods are used as tax incentives in some countries because they act as a tax relief since they lead to a lower reported net profit in the earlier years when an investment is still infant.

Revaluation Method

Under this method, professional valuers or experts are used to value the non-current assets/fixed assets such as land and buildings, livestock, packages, loose tools etc. At the end of the year, the value of the asset is compared with the value at the beginning of the year and the difference is depreciation expense.

NOTE: If the value of the asset at the end of the year is greater than at the beginning of the year, then it is appreciation and not depreciation though in most cases, depreciation is expected.

Disposal or Retirement of Fixed Assets

When fixed assets are worn out, become obsolete or useless, they are disposed of (sold off).

Note: Disposing off of an asset is not like an ordinary sale of goods because it is not routine but incidental and for that matter it should not be credited to the sales a/c but rather the cost of the asset is transferred to an account called Disposal a/c (debit side).

The accumulated depreciation a/c is also closed off to the disposal a/c so as to determine whether there is either a gain or loss on disposal. If there is a gain on disposal, it is credited to the profit and loss account as miscellaneous income and if there is a loss on disposal then it is debited to the profit and loss account as an expense.

Accounting Entries required for the Disposal of Fixed Assets.

Step 1: To transfer the cost of the asset to the disposal account, open a non-current asset (fixed asset) disposal account and debit it with the cost of the fixed asset disposed of as you credit the fixed asset account i.e.

Dr: Disposal A/C	xxxx
Cr: Non-current asset A/C	xxxx

Step 2: Transfer the accumulated depreciation of the asset being disposed of to the disposal account i.e.

Dr: NCA Accumulated depreciation A/C	xxxx
Cr: Disposal A/C	xxxx

Step 3: On sale of the asset, record the receipt of cash by debiting the Cashbook (Cash A/C or Bank A/C) as usual and crediting the disposal account i.e.

Dr: Cash/Bank A/C	xxx
Cr: Disposal A/C	xxx

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

2. Travellers Choice Ltd (TCL) sold off another bus, which had become economically unviable. Its cost was Shs 250,000,000. It was sold for Shs 70,000,000 and it had an accumulated depreciation of Shs 150,000,000. You are required to compute the profit/gain or loss on disposal.

Solution:

	UGX	UGX
Proceeds received upon disposal		70,000,000
Less NBV:		
Carrying value	250,000,000	
Less Acc Depn	<u>(150,000,000)</u>	<u>100,000,000</u>
Loss on disposal		<u><u>30,000,000</u></u>

3. A computer was bought on 1st Jan 2018 at Shs 2,000,000. It was then sold or disposed of 31/12/2020 at Shs1, 200,000. The computer was expected to last for a period of 10 years at the end of which it would have zero salvage value. It is the company policy to ignore depreciation in the year of disposal. Using the straight line method of depreciation, prepare:

- a) Computer account
- b) Computer Disposal account
- c) Computer Accumulated Depreciation account

Solution:

$$\begin{aligned} \text{Depreciation expense} &= \frac{\text{Cost} - \text{salvage value}}{\text{No. of years of useful life}} \\ &= \frac{(2,000,000 - 0)}{10} = \text{Shs } \underline{200,000} \end{aligned}$$

$$\text{Accumulated depreciation} = 200,000 \times 2 \text{ years} = \underline{400,000}$$

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

Computer Account

2018	Cash a/c	2,000,000	2018	Bal c/d	2,000,000
2019	Bal b/d	2,000,000	2019	Bal c/d	2,000,000
2020	Bal b/d	2,000,000	2020	Disposal a/c	2,000,000

Disposal Account

2020	Computer A/C	2,000,000	2020	Accum Depn A/C	400,000
			2020	Cash A/C	1,200,000
			2020	Loss o disposal	400,000
Total		2,000,000	Total		2,000,000

In case you are given the carrying value or Netbook value only (Cost minus Accumulated depreciation) ;(2,000,000 – 400,000) = Shs 1,600,000

Computer Disposal Account

2020	Computer A/C	1,600,000	2020	Cash A/C	1,200,000
			2020	Loss on disposal	400,000
Total		1,600,000	Total		1,600,000

Computer Depreciation Account

2018	Acc Depn a/c	200,000	2018	Profit/loss	200,000
2019	Acc Depn a/c	200,000	2019	Profit/loss	200,000

Computer Accum Depn Account

2018	Bal c/d	200,000	2018	Depn expenses a/c	200,000
			2019	Bal b/d	200,000
2019	Bal c/d	400,000	2019	Depn a/c	200,000
			2020	Bal b/d	400,000
			No depreciation in the year of disposal		

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

4. Twekobe Limited (TL) purchased a pick up costing Shs 25,000,000 on 1st Jan 2019, and then sold it at Shs 24 million on 31st December 2020. It is the company's policy to provide for depreciation at 10% on a straight line basis. Ignore depreciation in the year of disposal

Required: Prepare:

- Pick up account
- Pick up disposal account
- Pick up Accumulated depreciation account

Solution: Depreciation expense: $10\% \times 25,000,000 = \underline{2,500,000}$

Accumulated depreciation = $2,500,000 \times 1 \text{ year} = \underline{2,500,000}$

Pick up account

2019	Cash a/c	25,000,000	2019	Bal c/d	25,000,000
2020	Bal b/d	25,000,000	2020	Disposal a/c	25,000,000

Pick up Disposal A/C

2020	Pick up a/c	25,000,000	2020	Accum Depn	2,500,000
			2020	Cash a/c	24,000,000
2020	Gain on disposal	1,500,000			
Total		26,500,000	Total		26,500,000

Pick up Accumulated Depn a/c

2019	Bal c/d	2,500,000	2019	Depreciation a/c	2,500,000
2020	Disposal a/c	2,500,000	2020	Bal b/d	2,500,000
				No depreciation in the year of disposal	

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

5. A Motor Vehicle was purchased on 1st Jan 2019 at Shs 20,000,000. It was then sold off on 31st December 2021 at Shs 12,000,000. Provision for depreciation is 10% on reducing balance method. A full year's depreciation is charged in the year of acquisition and none in the year of disposal.

Required: prepare;

- Motor vehicle account
- Motor vehicle Depreciation account
- Motor vehicle Accumulated Depreciation account
- Motor vehicle Disposal account

Solution

Cost = Shs 20,000,000; Depreciation expense = 10% of NBV

YEAR	DEPRECIATION	ACCUM DEPN	NBV
2019	2,000,000	2,000,000	18,000,000
2020	1,800,000	3,800,000	16,200,000
2021	None in disposal year		

Note: when using reducing balance method, depreciation for the 1st year is determined as the provision rate x cost of asset. In the subsequent years, the depreciation expense is the rate x net book value.

Motor Vehicle a/c Account

2019	Cash a/c	20,000,000	2019	Bal c/d	20,000,000
2020	Bal b/d	20,000,000	2020	Bal c/d	20,000,000
2021	Bal b/d	20,000,000	2021	Disposal a/c	20,000,000

Motor Vehicle Disposal Account

2021	Computer A/C	20,000,000	2021	Accum Depn A/C	4,000,000
			2021	Cash A/C	12,000,000
			2021	Loss on disposal	4,000,000
Total		20,000,000	Total		20,000,000

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

Motor Vehicle Depreciation Account

2019	Acc Depn a/c	2,000,000	2019	Profit/loss	2,000,000
2020	Acc Depn a/c	2,000,000	2020	Profit/loss	2,000,000

Motor Vehicle Accum Depn Account

2019	Bal c/d	2,000,000	2019	Depn expenses a/c	2,000,000
			2020	Bal b/d	2,000,000
2020	Bal c/d	4,000,000	2020	Depn a/c	2,000,000
			2021	Bal b/d	4,000,000
			No depreciation in the year of disposal		

Exercise

1. Mercury Computers Ltd (MCL) owns a computer consultancy firm. It has many computers some of which have got old due to changes in technology. The following information relates to some computers.

- The first computer was bought on 4/3/2017 at Shs 40,000,000; the second computer on 5/6/2018 at Shs 60,000,000 and the third computer on 29/9/2020 at Shs 80,000,000.
- The first computer that was bought on 4/3/2017 was sold (disposed off) on 5/10/2020 for Shs 24,000,000 and the second computer that was bought on 5/6/2018 was sold on 10/1/2021 for UGX 36,000,000.

All computers are expected to last for 10 years at the end of which they have zero scrap values. It is the company's policy to charge full depreciation in the year of purchase and none in the year of disposal (sale) using the straight-line method of depreciation (SLM). The financial year runs from January 1st to December 31st. All transactions were on cash basis.

Required: Prepare the following accounts:

- Computers Account
- Computers Disposal Account

Makerere University Business School
BBA 1 Class Notes on Year End Adjustments
By Zulaika Nakabuye (CPA)

- c. Computer Accumulated Depreciation Account
- d. Show the extract of the Profit and Loss Account and the Statement of financial position at the end of each year.

2. The following information regarding Jomayi Projects Ltd (JPL) was obtained.

a) Statement of financial position Extract as 31/12/2012

	Cost	Accumulated Depreciation	Netbook Value
Equipment	250,000,000	(100,000,000)	150,000,000

b) On 2 Feb 2013, additional equipment was bought at a cost of Shs 250,000,000. Due to expansion in the market for serviced plots, equipment was bought on 24th June 2013 at a cost of Shs 37,500,000. However equipment which had been acquired at a cost of Shs 20,000,000 on 7th April 2010 and was expected to have a useful life of 5 years and a scrap value of Shs 1,250,000 could not cope up with bigger projects efficiently. On 5th July 2013, Management disposed it off at Shs 7,500,000.

c) Another equipment which was bought on 20th May 2010 at a cost of Shs 40,000,000 and was expected to have a salvage value of Shs 2,500,000 at the end of the tenth year broke down and was disposed of at Shs 17,500,000 on 3rd September 2013.

d) The company's policy is to charge full depreciation in the year of purchase and none at all in the year of sale (disposal). The company charges depreciation at a rate of 10% on cost for the equipment, which was available by the end of 31 December 2003. All transactions were by cheque.

Required: Show how the following accounts will appear at 31 December 2013.

- a. Equipment A/C
- b. Equipment Disposal A/C
- c. Equipment Accumulated Depreciation A/C