

TOPIC 7

[week 8 and 9]

DEPRECIATION OF FIXED ASSETS

LEARNING OUTCOMES

Upon completion of the lecture, the students should be able to:

- Understand the definition, purposes, and nature of depreciation.
- Compute the depreciation expenses using the Straight-line method and Reducing-balance method.
- Show the treatment for the disposal of fixed assets.

Definition and Purposes

- Depreciation is the process of allocating a non-current asset's cost to expenses over the period the asset is used.
- This process matches the asset's expense against the revenue generated over the asset's life.
- The primary purpose of depreciation is to measure profit, and the secondary purpose is the need to account for the asset's decline in usefulness.

Causes of depreciation

- **Physical deterioration**

Wear and tear

Erosion, rust, rot, and decay

- **Economic factors**

Obsolescence

Inadequacy

- **Time**

- **Depletion**

Important Points

- **Depreciation is not a process of valuation. Businesses do not record depreciation based on valuations of their assets made at the end of each period. Businesses allocate the asset's cost to the periods of its useful life based on a specific depreciation method.**
- **Depreciation does not mean that the business sets aside cash to replace assets as they become fully depreciated. Accumulated depreciation is that portion of the asset's cost that has already been recorded as expense. Accumulated depreciation does not represent a growing amount of cash.**

Measuring Depreciation

- **Cost**

The purchase price of the asset plus all other cost incidental to its acquisition.

- **Estimated useful life**

The length of service the business expects to get from the asset. It can be measured in years, units of output, or other measure of productive capacity.

- **Estimated residual value**

Also called scrap value or salvage value. Is the expected cash value of the asset at the end of its useful life.

- **Depreciable amount**

Is the asset's cost minus its estimated residual value.

Depreciation Methods

- **Straight-line Method**
- **Reducing-balance Method**
- **Units-of-production Method**
- **Sum-of-years-digits Method**

[For this course only the first two methods are covered].

Straight-line Method

- In this method, an equal amount of depreciation expense is assigned to each year [or period] of asset use. The depreciable amount is divided by useful life in years to determine the annual depreciation expense.
- The formula for this method is:

$$\text{Straight-line depreciation per year} = \frac{\text{Cost} - \text{Residual value}}{\text{Useful life in years}}$$

Reducing-balance Method

- Is one of the accelerated-depreciation method. An accelerated-depreciation method writes off a relatively larger amount of the asset's cost nearer the start of its useful life than does the straight-line method. The rationale is that for certain assets, the productive capacity is relatively higher in the early years than in the latter years. Hence, allowing for a better matching of expense and revenue. However, this method cannot be used if the residual value is zero.
- The formula for this method is:

N [number of years]

$$\text{Depreciation rate} = 1 - \sqrt[N]{\frac{\text{Residual value}}{\text{cost}}}$$

Worked Example

Data for depreciation calculations:

- Cost of equipment is \$100 000
- Estimated residual value is \$10 000
- Depreciable amount is \$90 000
- Estimated useful life is 5 years

Straight-line Method

- **Straight line depreciation per year:**

$$\begin{aligned} \text{Depreciation expense} &= \frac{\$100\,000 - \$10\,000}{5} \\ &= \$18\,000 \end{aligned}$$

The entry to record this depreciation is:

Debit Depreciation Expense Account with \$18 000

Credit Accumulated Depreciation Account with \$18 000

Reducing-balance Method

- The depreciation rate per year:

$$\text{Depreciation rate} = 1 - \sqrt[5]{\frac{\$10\,000}{\$100\,000}} \\ = 0.37$$

$$\text{Depreciation expense for the first year} = \$100\,000 \times .37 = \$37\,000$$

$$\text{Depreciation expense for the second year} = (\$100\,000 - \$37\,000) \times .37 = \$23\,310$$

Recording Depreciation

- **Depreciation Expense Account**

This account will record the depreciation expense incurred during the accounting period. The depreciation expense for the period will be transferred to the Profit and Loss account.

- **Accumulated Depreciation Account**

This is a contra account the asset account.

Accumulated depreciation Account records the total depreciation of the asset to date. The total Accumulated Depreciation Account for the accounting period will be transferred to the Balance Sheet.

The Double-entry Record

- **For the first year:**

Debit Depreciation Expense Account with \$37 000

Credit Accumulated Depreciation Account with \$37 000

- **For the second year:**

Debit Depreciation Expense Account with \$23 310

Credit Accumulated Depreciation Account with \$ 23 310

The Disposal of Non-current asset

- **On the sale of the asset, the following entries are needed:**
- **Transfer the cost price of the asset sold to an Asset Disposal account:**
 - Debit the Asset Disposal account**
 - Credit the Asset Account**
- **Transfer the depreciation already charged to the Asset Disposal Account:**
 - Debit the Asset Accumulated Depreciation Account**
 - Credit the Asset Disposal Account**

- **For the amount receive on disposal:**
 - Debit Cash Book**
 - Credit the Asset Disposal Account**
- **Transfer the difference [the amount needed to balance the Asset Disposal Account] to the Profit and Loss Account:**
 - **If it shows a credit balance [profit on sale]**
 - Debit the Asset Disposal Account**
 - Credit Profit and Loss Account**
 - **If it shows a debit balance [loss on sale]**
 - Debit Profit and Loss Account**
 - Credit the Asset Disposal Account**

TOPIC 8

[week 10 and 11]

ADJUSTMENTS TO THE FINANCIAL STATEMENTS

LEARNING OUTCOMES

Upon completion of the lecture, the students should be able to:

- Explain and show how bad debts are written off.
- Distinguish the differences between bad debts and provision of bad debts.
- Adjust the expense accounts for accruals and prepayments.
- Adjust the revenue accounts for the amount owing.
- Ascertain the amount of expenses and revenues to be shown in the Profit and Loss account.

Bad Debts

- **When some of the business's customers did not pay for the goods sold to them on credit the debts are considered bad debts.**
- **These bad debts must be charged to the profit and Loss Account as an expense when calculating the profit or loss for that period. In addition, the bad debts must be removed from the Asset Account.**
- **This is done by crediting the Debtor's account to cancel the asset and increasing the Expense account of bad debts by debiting it there.**

Reasons for Bad Debts

Among the reasons concerning bad debts are:

- **The debtors may be refusing to pay one of a number of invoices.**
- **The debtors may be refusing to pay part of the invoices.**
- **The debtors may owe payment on a number of invoices and has indicated that only a proportion of the total amount due will ever be paid because the debtor's business has failed.**
- **The debtor's business has failed and nothing is ever likely to be received.**

Provisions for Doubtful Debts

- **In drawing up the financial statements, few objectives have to be achieved:**
 - **To charge as an expense in the Profit and Loss Account for that year an amount representing debts that will never be paid.**
 - **To show in the Balance Sheet a debtors figure as close as possible to the true value of debtors at the Balance sheet date.**
- **Hence, so as not to overstate the debtors balance and the profit for the period, provision for doubtful debts is needed.**

Estimating the Provision

In order to arrive at a figure for doubtful debts, the business must consider that some debtors will never pay any of the amount owed, while others will pay part of the amount owing only, leaving the remainder permanently unpaid. The estimated figure can be made:

- **By looking at each debt, and deciding to what extent it will be bad.**
- **By estimating, on the basis of experience, what percentage of the total amount due from the remaining debtors will ultimately prove to be bad debts.**

Accounting Entries

- **Bad Debts Account**

This expense account is used when a debt is believed to be irrecoverable and is return off.

- **Provision for Doubtful Debts Account**

This account is used only for estimates of the amount of the debtors remaining at the year end after the bad debts have been written off that are likely are likely to finish up as bad debts.

- For the first year the provision is made

Debit the Profit and Loss Account with the amount of the provision

Credit the Provision for Doubtful Debts Account [the debtors amount in the Balance sheet will be deducted by the total provision]

- Increasing the provision

Debit the Profit and Loss Account with the increase

Credit the Provision for Doubtful Debts Account [the debtors amount in the Balance sheet will be deducted by the total provision]

- Reducing the provision

Debit the Provision for Doubtful Debts Account [the debtors amount in the Balance sheet will be deducted by the total provision]

Credit the Profit and Loss Account with the decrease

- If there is a reduction in the provision, it is treated as a gain to the gross profit, and if there is an increase in the provision, it is treated as an expense to the gross profit.

Bad debts recovered

When a debt that has been written off is recovered,

- **Reinstate the debt by making the following entries:**

Debit the Debtor's Account

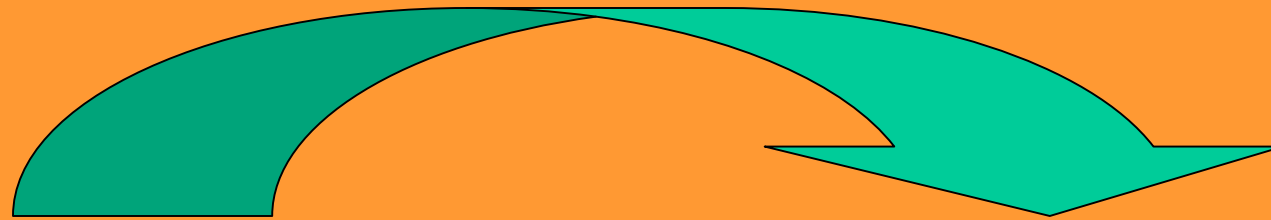
Credit the Bad Debts Recovered Account

- **When payment is received from the debtor in settlement of all or part of the debt:**

Debit the Cash or Bank Account

Credit the Debtor's Account

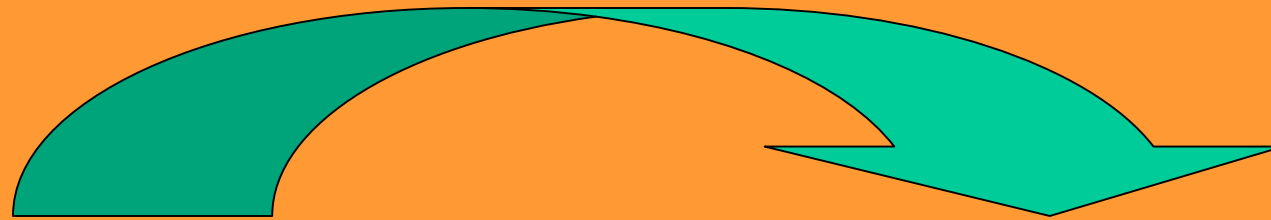
Accruals



- **Current Period**
The expense or revenue incurred

- **Future Period**
Cash is paid or received

Deferrals



- **Current Period**
Cash is paid or received

- **Future Period**
The expense or revenue incurred

Typical Accounts

- **Accruals**

Accrued Rent, Credit sales etc.

- **Deferrals**

Prepaid expenses, Unearned revenue etc.

TOPIC 9
[week 12]

BANK
RECONCILIATION
STATEMENTS

LEARNING OUTCOMES

Upon completion of the lecture, the students should be able to:

- Explain why bank reconciliation are done.
- Reconcile the Cash-book balances with the Bank reconciliation statement balances.
- Understand why the cheques may be dishonoured and what the effect will be upon the bank balances.

Purpose of preparing the Bank Reconciliations

In the books of a business, funds are paid into and out of the bank are entered into the bank columns of the Cash Book. At the same time, the bank will also be recording the flows of funds into and out of the business bank account.

Hence, there may be items paid into or out of the business bank account which have not been recorded in the Cash Book. In addition, there may be items that are entered in the Cash Book but have not been entered in the bank's records of the account.

Therefore, the Cash Book entries need to be compared to the record of the account held by the bank.

Where Closing Balance Differ

The business may be able to keep the Cash Book up to date, but it obviously cannot alter the bank's own record. Therefore, there may still exist a difference between the Cash Book balance and the balance on the bank statement.

- **For example:**

The balance in the Cash Book is \$600 [debit] and the balance in the bank statement is \$330. After comparing the entries in the Cash Book with the bank statement, two items are in the Cash Book but are not shown in the bank statement.

- **A cheque had been paid to M on January 30. He deposited it in his bank on January 31 but his bank didn't collect the money from the business's bank until February 2. This is known as unpresented cheque.**

- **A cheque for \$470 received from N on January 31 and the business deposited it with the bank on that date, but the bank did not receive the funds from N's bank until February. This is known as bank lodgement not yet credited to the business bank account.**

Bank Reconciliation Statement as at 31 December 20x7

	[\$]
Balance as per cash book	600
Add: Unpresented cheque	200
	800
Less: Bank lodgement not on statement	[470]
Balance per bank statement	330

- If the two balances cannot be reconciled, there will be an error somewhere. This will have to be located and then corrected.

Alternative Approach to Bank Reconciliations

- In order to avoid confusion that may arise concerning what figure to include in the Balance Sheet, many accountants use a different form of Bank Reconciliation.**
- In this approach, the balance as shown in the bank statement and the balance in the Cash Book before making any adjustments that are identified when it is compared to the bank statement. Then, the two balances are reconcile to arrive at the balance that should appear in the Balance Sheet.**
- After reconciliation, update the Cash Book so that it balances at the correct amount [Balance Sheet balance].**

- **For example:**

The Cash Book balance is \$267 and the balance shown on the bank statement is \$204. After comparing the entries on the Cash Book and the bank statement, there exist two items missing from the cash Book and two items missing from the bank statement.

- **Items missing from the Cash Book:**

- **A bank giro credit of \$24 made on December 30 by A.**
- **Bank Charges of \$40.**

- **Items missing from the bank statement:**

- **A cheque paid to D for \$25 on December 31 has not yet been presented**
- **A bank lodgement has not yet been credited [the cheque for \$72 received from S on 31 December].**

Bank Reconciliation Statement as at 31 December 20x7

	[\$]
Balance as per cash book	267
Add: Bank giro credit not yet entered	24
	291
Less: Bank lodgement not on Balance Sheet	[40]
Balance in balance Sheet	251
Add: Cheque not yet presented	25
	276
Less: Bank lodgement not on statement	[72]
Balance per bank statement	204

Bank Overdrafts

- The adjustment needed to reconcile a bank overdraft according to the business's books [shown by a credit balance in the Cash Book] with that shown in the bank's records are the same as those needed when the account is not overdrawn.
- For example:

	[\$]
Balance / overdraft per Cash Book	[xxxx]
Adjustments:	
Unpresented cheque	Plus
Bank lodgement not on bank statement	Less
Balance / overdraft per Cash Book	[xxxx]

Dishonoured Cheques

- **When a cheque is received from a customer and paid into the bank, it is recorded on the debit side of the Cash Book. It is also shown on the bank statement as a deposit increasing the balance on the account. However, at a later date it may be found that the customer's bank will not pay the amount due on the cheque. The customer's bank has failed to honour the cheque. This cheque is known as a dishonoured cheque.**
- **Several possible reasons for a cheque to be dishonoured are listed below:**
 - **The amount written on the cheque is not the same as the figure on the cheque.**
 - **The customer did not have sufficient funds in the bank.**
 - **The cheque is outdated. Normally a cheque is considered stale six months after the date on the cheque.**

Recording Dishonoured Cheque

- **For example:**

A debtor paid \$5 000 with a cheque.

- The initial double-entry record

Debit Cash Book with \$5 000

Credit the Debtor Account with \$5 000

- When the cheque is dishonoured

Debit the Debtor Account back with \$5 000

Credit the Cash Book with \$5 000

TOPIC 10
[week 13]

CONTROL
MECHANISMS

LEARNING OUTCOMES

Upon completion of the lecture, the students should be able to:

- Understand how control mechanism that are the sales ledger and the purchase ledger can be useful in accounting for control purposes.
- Understand the reasons for Suspense account and how it is used for accounting purposes.

Week 14

REVISION

REFERENCES

Wood, F. & Sangster, A. [1996]. **Business Accounting 1**. 7th edition, London: Pitman Publishing.

Horngren, Harrison, Best, Fraser & Izan [1997]. **Accounting**. 2nd edition, Australia: Prentice Hall.