# INTRODUCTION TO FINANCIAL ACCOUNTING II ACC204 COURSE GUIDE 

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CONTENT<br>Introduction<br>Course Aim<br>Course Objectives<br>Study Units<br>Assignments<br>Tutor Marked Assignment<br>Final Examination and Grading<br>Summary

## INTRODUCTION

What you have in your hand is the course guide for ACC204 (Introduction to Financial Accounting 1I). The purpose of the course guide is to relate to you the basic structure of the course material you are expected to study as a B.Sc. Accounting Student in National Open University of Nigeria. Like the name 'course guide' implies, it is to guide you on what to expect from the course material and at the end of studying the course material.

## COURSE CONTENT

The course content consists basically of the treatment of accounting transactions according to the provisions of relevant accounting standards.

## COURSE AIM

The aim of the course is to introduce you to basic principles of accounting and to understand how financial documents are posted into accounting record in order to determine the profit or loss of an organisation. It also includes practical treatment of accounting transactions conducted through the bank and how errors in accounting are treated.

## COURSE OBJECTIVES

At the end of studying the course material, among other objectives, you should be able to:
I. Identify special and general journals and make distinction between them
II. Perform the mechanics of simple and compound journal entries;
III. Learn the meaning of a trial balance and how it is constructed;
IV. Identify the errors that affect the trial balance and how they are corrected using suspense account;
V. Explain the meaning of suspense account, when it is to be used and its mechanics/preparation;
VI. Distinguish between current assets and current liabilities.
VII. Learn the accounting entries for these transactions and how they are recognised in the statement of financial position;
VIII. Identify and distinguish between items that are used in determining gross profit and net profit;
IX. Make adjustments to expenses incurred but unpaid for as well as unexpired recurrent expenditure; and
X. Adjust for deferred revenues.

## COURSE MATERIAL

The course material package is composed of:
The Course Guide
The Study Units
Self-Assessment Exercises
Tutor Marked Assignment
References/Further Reading
THE STUDY UNITS
The study units are as listed below:
THE JOURNALS ..... 8
TRIAL BALANCE I: ERRORS AND SUSPENSE ACCOUNT ..... 18
TRIAL BALANCE II: SPECIAL KIND OF ERRORS ..... 29
CURRENT ASSETS AND CURRENT LIABILITIES ..... 42
LONG-TERM LIABILITIES AND OWNERSHIP EQUITY ..... 51
REVENUE EXPENDITURE AND CAPITAL EXPENDITURE ..... 59
BAD DEBTS AND ALLOWANCES FOR BAD DEBTS ..... 67
ACCRUALS AND PREPAYMENTS ..... 78
DEPRECIATION I: INTRODUCTORY CONCEPTS AND METHODS ..... 90
DEPRECIATION II: FURTHER ISSUES AND ACCOUNTING ENTRIES ..... 101
ACCOUNTING FOR THE PURCHASE AND SALE OF NON-CURRENT ASSETS ..... 115
INVENTORY VALUATION I: PERIODIC INVENTORY MODEL ..... 127
INVENTORY VALUATION II: PERPETUAL INVENTORY MODEL ..... 143
MANUAL AND COMPUTERISED ACCOUNTING SYSTEM ..... 154
THE CONCEPTUAL FRAMEWORK AND ACCOUNTING POLICY ..... 161
FINANCIAL STATEMENT OF A SOLE TRADER - INCOME STATEMENT ..... 170
FINANCIAL STATEMENT OF A SOLE TRADER - FINANCIAL POSITION ..... 178
FINANCIAL STATEMENT OF A SOLE TRADER - COMPREHENSIVE ILLUSTRATION ..... 185
EXTENDED TRIAL BALANCE OF A SOLE PROPRIETORSHIP ..... 199
BANK RECONCILIATION STATEMENT. ..... 207
CONTROL ACCOUNTS: SALES AND PURCHASES LEDGERS ..... 220

## ASSIGNMENTS

Each unit of the course has a self assessment exercise. You will be expected to attempt them as this will enable you understand the content of the unit.

## TUTOR MARKED ASSIGNMENT

The Tutor Marked Assignments (TMAs) at the end of each unit are designed to test your understanding and application of the concepts learned. Besides the preparatory TMAs in the course material to test what has been learnt, it is important that you know that at the end of the course, you must have done your examinable TMAs as they fall due, which are marked electronically. They make up to 30 percent of the total score for the course.

## CONCLUSION

Commitment of adequate study hours is required to maximise the benefit of understanding this course material.

# INTRODUCTION TO FINANCIAL ACCOUNTING II ACC204 MAIN CONTENT 

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Contents
THE JOURNALS .....  8
TRIAL BALANCE I: ERRORS AND SUSPENSE ACCOUNT ..... 18
TRIAL BALANCE II: SPECIAL KIND OF ERRORS ..... 29
CURRENT ASSETS AND CURRENT LIABILITIES ..... 42
LONG-TERM LIABILITIES AND OWNERSHIP EQUITY ..... 51
REVENUE EXPENDITURE AND CAPITAL EXPENDITURE ..... 59
BAD DEBTS AND ALLOWANCES FOR BAD DEBTS ..... 67
ACCRUALS AND PREPAYMENTS ..... 78
DEPRECIATION I: INTRODUCTORY CONCEPTS AND METHODS ..... 90
DEPRECIATION II: FURTHER ISSUES AND ACCOUNTING ENTRIES ..... 101
ACCOUNTING FOR THE PURCHASE AND SALE OF NON-CURRENT ASSETS ..... 115
INVENTORY VALUATION I: PERIODIC INVENTORY MODEL ..... 127
INVENTORY VALUATION II: PERPETUAL INVENTORY MODEL ..... 143
MANUAL AND COMPUTERISED ACCOUNTING SYSTEM ..... 154
THE CONCEPTUAL FRAMEWORK AND ACCOUNTING POLICY ..... 161
FINANCIAL STATEMENT OF A SOLE TRADER - INCOME STATEMENT ..... 170
FINANCIAL STATEMENT OF A SOLE TRADER - FINANCIAL POSITION ..... 178
FINANCIAL STATEMENT OF A SOLE TRADER - COMPREHENSIVE ILLUSTRATION ..... 185
EXTENDED TRIAL BALANCE OF A SOLE PROPRIETORSHIP ..... 199
BANK RECONCILIATION STATEMENT ..... 207
CONTROL ACCOUNTS: SALES AND PURCHASES LEDGERS ..... 220

## UNIT 1

## THE JOURNALS

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 What is a journal?
3.2 Usefulness of general journal
3.3 Illustrative Example
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit discusses the two basic types of journal namely; special and general journals, but major emphasis will be on the general journal since the concept and mechanics of the special journals have been elaborately treated in introduction to financial accounting.

### 2.0 OBJECTIVES

After studying this Unit, the student should be able to identify special and general journals and make distinction between them. The student is also expected to know and be able to perform the mechanics of simple and compound journal entries.

### 3.0 MAIN CONTENT

### 3.1 What is a journal?

A journal is a chronological record of the transactions of a business entity. It is a form of diary that is used to record transactions before they are posted to the related ledgers. There are two basic types of journal: special and general journals.

A special journal is designed in a tabular form to record one type of transaction involving sales and purchases. Examples of special journals are sales journal, purchases journal, sales return journal and purchases return journal. Sales journal also referred to as sales day book is used as a diary for recording all sales transactions on credit before the aggregated amount at the end of the period is posted to sales account and the individual transactions are posted to the respective accounts of the trade debtors (or as gross to trade receivables account - see Unit 21). Like the sales journal, the purchases journal is used to keep daily track of purchases on account or credit. The same procedures are followed in entering transactions of purchases returns and sales returns.

Exhibit 1.1: Sales Journal of Johnson Ltd for first week of June 2016

| Date | Folio | Detail | Amount (N) |
| :--- | :--- | :--- | :--- |
| June 1 |  | Heavenly Brothers | 234,000 |
| June 3 |  | Liberty | 34,000 |
|  |  | Olaoluwa | 56,000 |
|  | Briggs \& Briggs | 132,400 |  |
| June 4 |  | Osamudiamen Feeling Good | 67,890 |
| June 5 |  | It Is Well Stores | 77,300 |
| June 6 |  | Modupe Sisters | 81,250 |


| June 7 |  | Total transferred to sales account | $\mathbb{1} 933,640$ |
| :--- | :--- | :--- | :--- |

At the end of the first week of June 2016, the gross sales on account of $\mathbf{N} 933,640$ will be credited to the sales account while the personal accounts of the different debtors will be debited with the amount of goods sold to them on credit.

The general journal is a chronological record of the transactions of a business entity analysed in terms of debits and credits and accompanied by narrations. A narration is the explanation that clarifies why the entry is made. The general journal enables the double-entry of a transaction to be treated as it records both the debit and credit sides of a transaction by identifying and naming the accounts to be debited and credited. It can be used to perform a similar function like the ledger in addition to its advantage of having a narration relating to the events recorded.

The accounting process of entering transactions into the journal is called journalising. A general journal records transactions according to the manner in which they will be posted to the respective accounts in the ledger. For example, when the owner of a business invests cash of $\mathbf{~} 100,000$ into his business, the usual postings in the ledger would be to debit Cash Account with $¥ 100,000$ and credit Capital Account with $¥ 100,000$. This means that two separate accounts would be opened, that is, cash account and capital account. The journal records the transaction to cash and capital accounts as one event followed by a narration as shown below:

Exhibit 1.2: Extract General Journal1

| Date or <br> Item no | Detail | Debit (\#) | Credit (N) |
| :--- | :--- | :--- | :--- |
| 1 Jan. 2016 | Cash A/c <br> Capital A/c <br> Being cash invested into the business by the owner | 100,000 | 100,000 |

The general journal entry might involve only two accounts as in the above illustration. It might also involve more than two accounts and when this happens such a journal entry is called a compound journal entry. For example, if a business venture bought machinery for $\$ 450,000$ with payment of $¥ 300,000$ and the balance on account due in one year, the general journal would record this transaction as follows:

Exhibit 1.3: Extract general journal 2

| Date or <br> Item no | Detail | Debit (\#) | Credit (\#) |
| :--- | :--- | :--- | :--- |
| $30 / 6 / 2016$ | Machinery A/c <br> Cash A/c <br> Accounts Payable (non-trading) <br> Being purchase of machinery partly in cash and on <br> account due in one year | 450,000 | 300,000 |

### 3.2 Usefulness of general journal

i. It is useful in recording miscellaneous transactions that may not fit into any specific kind of ledger.
ii. It is useful in making end of year adjusting entries.
iii. It is useful in correcting errors arising from the book-keeping process.
iv. The added narration gives the advantage of easily recognising where and how the transactions emanated.

### 3.3 Illustrative Example

## Comprehensive Example 1

The accounts of Chigozie Enterprises had the following balances at the beginning of a period:

| Accounts | Dr (N) | Cr (N) |
| :--- | :---: | :---: |
| Accounts payable |  | 3,000 |
| Accounts receivable | 2,200 |  |
| Accumulated depreciation |  | 2,870 |

Allowance for doubtful debts ..... 90
Cash ..... 1,400
Non-current assets at cost ..... 6,000
Inventories ..... 1,930
Note payable (current) ..... 650
Capital

$\qquad$ ..... 4,920
N 11,530 ..... N 11,530
The following transactions occurred during the period;

1. Purchases on account $¥ 1,100$
2. Salaries paid $\AA 820$
3. Cash sales $¥ 1,870$; sales on account $£ 2,050$
4. General expenses paid $¥ 950$
5. Collection of accounts receivable $¥ 1,700$
6. Payment of accounts payable $¥ 1,800$
7. Cash received now for revenue of next period $¥ 550$
8. Increase in note payable $\# 150$
9. Depreciation N 320
10. Closing inventories $\$ 1,800$
You are required to:
a. Prepare the general journal entries of the above transactions
b. Post the entries to the relevant ledger accounts

## SOLUTION

Solution: 1a
Chigozie Enterprises
General Journal

| Date or <br> Item no | Detail | Debit (N) | Credit (N) |
| :--- | :--- | :--- | :--- |
| 1 | Purchases A/c <br> Accounts payable A/c <br> Being purchases made on credit | 1,100 | 1,100 |
| 2 | Salaries A/c <br> Cash A/c <br> Being amount of salaries paid by cash | 820 | 820 |
| 3 a | Cash A/c <br> Sales A/c <br> Being cash sales during the period | 1,870 | 1,870 |
| 3 b | Accounts receivable A/c <br> Sales A/c <br> Being sales on account/credit during the period | 2,050 | 2,050 |
| 4 | General expenses A/c <br> Cash A/c <br> Being general expenses incurred and paid for by cash | 1,700 | 1,700 |
| 5 | Cash A/c <br> Accounts receivable A/c <br> Being cash receipt from trade debtors | 950 | 1,800 |
| 6 | Accounts payable A/c <br> Cash A/c <br> Being cash payment to trade creditors | 550 |  |
| 7 | Cash A/c <br> Deferred income A/c <br> Being cash received in advance for next period's sales | 150 | 1,800 |
| 8 | Cash A/c <br> Note payable A/c <br> Being cash receipt for increase in note payable | 550 |  |
| 9 | Income statement <br> Provision for depreciation A/c <br> Being the depreciation expense for the period | 1,800 | 1,800 |
| 10 | Closing inventories A/c <br> Income statement <br> Being the amount of closing inventories for the period | 320 | 50 |

You should also note that item 3 a and 3 b can be recorded as a compound journal entry which would involve more than two accounts but have a single narration. It would now appear as follows:

| Date or <br> Item no | Detail | Debit (\#) | Credit (N) |
| :--- | :--- | :--- | :--- |
| 1 | Cash A/c |  |  |
|  | Accounts receivable A/c <br> Sales A/c <br> Being amount of sales for cash and on account | 1,870 |  |

## Solution: 1b

Postings to the relevant ledgers

| Dr | Accounts Payable A/c |  | C |
| :---: | :---: | :---: | :---: |
|  | $\pm$ |  | N |
| Cash | 1,800 | Bal.b/f | 3,000 |
| Bal. c/f | 2,300 | Purchases | 1,100 |
|  | \#4,100 |  | ※4,100 |
|  |  | Bal. b/f | \#2,300 |


| Dr | Purchases A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  |  | $\underline{N}$ |  |
|  | $\underline{1,100}$ | Income statement | $\underline{\underline{1,100}}$ |


| Dr | Salaries A/c |  | Cr |
| :--- | :---: | :--- | :---: |
| Cash | $\underline{\# 20}$ | Income statement | $\underline{\underline{820}}$ |


| Dr | Sales A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Cash | 1,870 |
| Income statement | 3,920 | Accounts receivable | 2,050 |
|  | (4,100 |  | \#3,920 |


| Dr | Accounts Receivable A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal. b/f | 2,200 | Cash | 1,700 |
| Sales | 2,050 | Bal. c/f | 2,550 |
|  | N4,250 |  | N4,250 |
| Bal. b/f | $\cdots 2,550$ |  |  |


| Dr | General Expenses A/c | Cr |  |
| :--- | ---: | :--- | :---: |
|  | $\underline{N}$ |  | $\underline{n}$ |
| Cash | $\underline{\underline{950}}$ | Income statement | $\underline{\underline{950}}$ |


| Dr | Deferred Income A/c |  | Cr |
| :--- | ---: | :--- | ---: |
| Bal. c/f | $\underline{\ldots}$ |  | $\underline{\mathrm{N}}$ |
|  | $\underline{\underline{550}}$ | Cash | $\underline{\underline{550}}$ |
|  |  | Bal. b/f |  |


| Dr | Note Payable A/c |  | Cr |
| :---: | :---: | :---: | :---: |
| Bal. c/f | N |  | N |
|  |  | Bal. b/f | 650 |
|  | 800 | Cash | 150 |
|  | N800 |  | N800 |
|  |  | Bal. b/f | $\pm 800$ |


| Dr | Provision for Depreciation A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | \# |
|  |  | Bal. b/f | 90 |
| Bal. c/f | 410 | Income statement | 320 |
|  | N410 |  | N410 |
|  |  | Bal. b/f | \$410 |


| Dr | Closing Inventories A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | $\pm$ |  | N |
| Income statement | $\underline{1,800}$ | Bal. c/f | $\underline{1,800}$ |
| Bal. b/f | \# 1,800 |  |  |


| Dr | Cash A/c |  | Cr |
| :--- | :---: | :--- | ---: |
|  | $\underline{\mathrm{N}}$ |  | $\underline{\mathrm{N}}$ |
| Bal. b/f | 1,400 | Accounts payable | 1,800 |
| Sales | 1,870 | Salaries | 820 |
| Accounts receivable | 1,700 | General expenses | 950 |
| Deferred income | 550 |  |  |
| Notes payable | $\underline{150}$ | Bal. c/f | $\underline{3,570}$ |
|  |  | 15 |  |


| Bal. b/f | $\underline{\# 5,670}$ | $\underline{\# 5,670}$ |
| :--- | :--- | :--- |
|  |  |  |

### 4.0 CONCLUSION

We have examined the general and special journals and how they are used in the bookkeeping process.

### 5.0 SUMMARY

Journals are diaries for tracking day-to-day transactions of a business entity. Journals are broadly categorised into special journal and general journal. The special journals are used to record specific transactions, for example, sales journal (also known as sales day book) is used for recording all credit sales before the total is transferred to sales account and the individual items transferred to the individual personal accounts of the trade debtors. Other special journals follow the same principles highlighted in sales journal. The general journal records all kinds of transactions by highlighting the double entry of the transactions as they should appear in their relevant accounts coupled with narrations explaining the events of the recorded transactions.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Differentiate between special and general journals using two (2) examples for each.
2. What is a compound journal entry?
3. What do you think are the usefulness of the general journal?
4. Prepare the general journal entries for the following transactions in the book of Makowa Merchandising for the month of April 2016:

1 Invested cash of $£ 500,000$ which he paid into bank
4 Paid office rent for April, $¥ 20,000$

6 Purchased goods on account $£ 50,000$
10 Sold goods for cash $¥ 120,000$
18 Sold goods on account $\$ 25,000$
19 Purchased a new machinery for $£ 56,000$
22 Paid trade creditors by cheque $\$ 20,000$
23 Purchased a motor vehicle for $\$ 40,000$ partly by cheque of $£ 18,000$ and on account

26 Received cheque from trade customers $\# 15,000$ in full settlement of $\# 15,500$ debt

28 Goods amounting to $¥ 1000$ were returned to suppliers
29 Makowa withdraws good worth $£ 5,000$ and cash of $£ 30,000$ for personal use.
30 Makowa converted his personal car valued at $\pm 52,000$ for business use.

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

Hermanson, R. H., Edwards, J. D., \& Salmonson, R. F., (1980). Accounting principles, Dallas Texas: Business Publications, Inc.

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## UNIT 2

## TRIAL BALANCE I: ERRORS AND SUSPENSE ACCOUNT

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Trial balance, Errors and Suspense Account
3.2 Trial Balance Revisited
3.3 Trial Balance and Errors
3.4 Errors That Affect the Trial Balance
3.5 Suspense Account
3.6 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit is intended to reinforce our understanding of trial balance and how to handle errors that are associated with the extraction of the trial balance as well as how they can be corrected through the use of suspense account. It lays the foundation for understanding and appreciating other kinds of error that do not affect the trial balance, which shall be covered in Unit 3

### 2.0 OBJECTIVES

Upon completing this Unit, the student is expected to be able to know the meaning of a trial balance and how it is constructed. The student should also be able to identify the errors that
affect the trial balance and how they are corrected using suspense account. Thus, the student should be able to explain the meaning of suspense account, when it is to be used and its mechanics/preparation.

### 3.0 MAIN CONTENT

### 3.1 Trial balance, Errors and Suspense Account

### 3.2 Trial Balance Revisited

A trial balance is a list of ledger balances that is used to ascertain the arithmetical accuracy of the double entry system of book-keeping. It is used to check whether the total of all the debit balances is equal to that of the credit balances. As you are already aware, for every debit entry, there is a corresponding credit entry. If this simple process is accurately followed, it is logical to have the debit balances equal to the credit balances. In extracting the debit and credit balances, it is important one understand the items that are conventionally debit accounts and those that are credit accounts. For example, all assets (whether non-current or current), expenses and losses are conventionally debit accounts, whereas all liabilities, capital and revenues/gains/income are conventionally credit accounts. With this understanding, it is easy to identify the items that should be on the debit side and those on the credit side. You should also remember that any accounts (whether asset, expense, liability, revenues) that balanced out cannot go through the trial balance. For example, if sales of $\$ 1,100$ was made to Babalola on credit, an account receivable account [debtor account] is created in respect of Babalola. But if at the end of the reporting period Babalola has not yet paid his outstanding debt, his account will be part of the list of debit balances in the trial balance as shown in his account in exhibit 2.1 below. Whereas, if Babalola paid his outstanding debt during the reporting period, there will be no outstanding balance in his account and so his account will not reflect as part of the list of balances on the debit side of the trial balance as exhibit 2.2 shows no end of year balance in the account .

## Exhibit 2.1

| Dr | Babalola A/c |  | Cr |
| :--- | :---: | :--- | :---: |
| Sales | $\underline{\mathrm{N}}$ |  | $\underline{\mathrm{N}}$ |
| Bal. b/f | $\underline{1,100}$ | Bal. c/f | $\underline{\underline{1,100}}$ |

## Exhibit 2.2

| Dr | Babalola A/c |  | Cr |
| :--- | :---: | :--- | :---: |
| Sales | $\underline{\mathrm{N}}$ |  |  |
|  | $\underline{1,100}$ |  | $\underline{\underline{1,100}}$ |

Trial balance is one of the simplest exercises to perform in the book-keeping process as it is apparently the listing of all debits and credit balances for the purpose of ascertaining the arithmetical accuracy of the double entry system of book-keeping. While the balancing of the trial balance is important, the accuracy of listing items according to their nature (debit or credit) is equally very important. For example, if a balance in revenue account which is conventionally a credit balance is placed on the debit side and the corresponding opposite entry is placed on credit side, the trial balance may balance but not without an error (we shall consider this group of error in Unit 3). See the Shagari example below which illustrates the segregation of items of account balances into debit and credit listing in the trial balance.

## Extract a trial balance from the list of ledger balances in the books of Shagari on

 31/12/2015:|  | $\ldots$ |
| :--- | :--- |
| Trade accounts receivables | 30,000 |
| Trade accounts payable | 35,000 |
| Rent | 140,000 |
| Prepayments | 1,000 |


| Insurance | 30,000 |
| :--- | :--- |
| Rates | 12,500 |
| Accounts payable | 2,000 |
| Wages and salaries | 22,000 |
| Electricity | 6,600 |
| Capital | 40,000 |
| Rental income | 3,900 |
| Sales | 500,000 |
| Purchases | 212,000 |
| Bank | 126,800 |
| Return outwards | 2,000 |
| Return inwards | 800 |
| Opening inventory | 1,200 |

## Solution:

Shagari's Trial balance as at 31st December 2015

| Account | DR | CR |
| :--- | :---: | :---: |
|  | N | N |
| Trade accounts receivable | 30,000 |  |
| Trade accounts payable | 140,000 |  |
| Rent | 1,000 |  |
| Prepayments | 30,000 |  |
| Insurance | 12,500 |  |
| Rates |  | 2,000 |
| Accounts payable |  |  |


| Wages and salaries | 22,000 |  |
| :---: | :---: | :---: |
| Electricity | 6,600 |  |
| Capital |  | 40,000 |
| Rental income |  | 3,900 |
| Sales |  | 500,000 |
| Purchases | 212,000 |  |
| Bank | 126,800 |  |
| Return outwards |  | 2,000 |
| Return inwards | 800 |  |
| Opening inventory | 1,200 |  |
|  | $\mathrm{\#}$ 582,900 | N 582,900 |

### 3.3 Trial Balance and Errors

The trial balance helps to ascertain the arithmetical correctness of the ledger balances. Whereas the equality of the debits and credits satisfies the necessary condition for the correctness of the trial balance, it is not a sufficient condition that the trial balance is errorfree. This suggests that some errors committed in the book-keeping process can be revealed by the trial balance while there are others that the trial balance cannot reveal. We shall now look at these errors that affect the trial balance in section 3.4, while Unit 3 will examine the errors that do not affect the trial balance.

### 3.4 Errors That Affect The Trial Balance

When these errors occur, the total on the debit side and the total on the credit side will be unequal. No matter the amount by which the debit side is greater or less than the credit side, or vice versa, the difference has to be investigated in the books so that it can be corrected
before the preparation of the financial statements. Prior to the detection and the correction of the error or combination of errors making the trial balance not to balance, a temporary account is created to record that difference and inserted in the list of the account balances in the trial balance. This account is called suspense account. All the errors that make the trial balance not to be equal would eventually be corrected through the suspense account until the errors are eliminated. The following are the errors that would make the totals on the debit side and credit side of the trial balance to be unequal:
i. Casting error: Casting simply means adding up. Casting error occurs when the bookkeeper commits an error in the process of adding up the transactions in a ledger or combination of ledger accounts or in adding up the listed items in the trial balance. When casting error occurs in the trial balance and not the individual accounts, it is pretty easy to correct as this would be spotted with a recast of the debit or credit side, or both. This of course will not require any accounting entry and correction through the suspense account. For example, if in our example in section 3.2 above, the debit totals is $\# 582,900$ and the credit totals is $£ 580,900$, assuming also that all the entries on the list are correct, a more careful recast of the debit side will reveal the correct total of $¥ 582,900$. One plausible reason for the error might be that the book-keeper skipped adding up the return outwards value of $¥ 2,000$ or wrong punching of the calculator. Since this error was not committed as an omission in the list of balances, it cannot be regarded as an error of omission. We shall discuss later how an error of omission is committed in relation to the trial balance. An example of casting error that occurs in an individual account can be seen from exhibit 2.3 below, where, instead of having a total of $\not \equiv 7,100$ the book-keeper had a cast of $\# 7,080$ leading to an understatement of the accounts receivable account by $\$ 20$ :

## Exhibit 2.3

| Dr | Accounts Receivable A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal. b/f | 1,920 | Bank | 6,050 |
|  |  | Discount allowed | 80 |
|  |  | Bad debt | 150 |
| Sales | 5,180 | Bal. c/f | 800* |
|  | \#7,080 |  | $\pm 7,080$ |
| Bal. b/f | \#800 |  |  |

What we can learn from the illustration from the above exhibit is that casting error could bring about an over-adding [overstatement error] or under-adding [understatement error] of an account making the difference taking to the trial balance to distort the balancing of the trial balance when the bank, discount allowed, bad debt and sales are appropriately posted to their respective accounts. To correct this error, $¥ 20$ has to be added to the accounts receivable a/c. The resulting accounting entry will be: Debit (Dr) Accounts receivable a/c and Credit (Cr) Suspense a/c

Journal entry

| Date or <br> Item <br> no | Detail | Debit (Dr) <br> $\sim$ | Credit (Cr) <br> $\ldots$ |
| :--- | :--- | :--- | :--- |
|  | Account receivable A/c <br> Suspense A/c <br> Being correction of casting error | 20 | 20 |

ii Omission of one side of a transaction: This error makes the trial balance not to balance as only one side of the double entry of a transaction is posted to the ledger. For example, an entity bought a motor vehicle for $\$ 100,000$ paid for by cheque and the amount was posted to motor vehicle a/c but omitted from the bank account. In order to correct this error, you Dr Suspense a/c and Cr Bank a/c as shown below.

Journal entry

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Suspense A/c <br> Bank A/c <br> Being purchase of motor vehicle omitted from the <br> cash book but rightly posted to motor vehicle a/c | 100,000 | 100,000 |

iii Transposition error: This error occurs when one or more digit(s) of a figure is/are transposed in error. For example, if instead of recording sales of $¥ 808,000$ in the sales $\mathrm{a} / \mathrm{c}$, the book-keeper records it as $¥ 880,000$, this results in an error of transposition because the entire digits and figures in the sales value are the same. As you are already familiar with the error of overstatement or understatement, you might consider this as an overstatement error. While you are correct, you should appreciate that this is a special kind of overstatement because of the identical nature of all the digits making up the two values and the fact that the error does arise from adding up of items of transactions. In order to correct this error, you Dr Sales a/c and Cr Suspense a/c.

Journal entry

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Sales A/c <br> Suspense A/c <br> Being correction of sales of N808,000 recorded as <br> N880,000 | 72,000 | 72,000 |

Transposition error will only affect the trial balance if the same error is not committed in the corresponding entry. If all the sales were made on credit and $\# 808,000$ is correctly debited to accounts receivable, the error will affect the trial balance. But it will be more complex if the same error was made in both accounts receivable and sales accounts. We will discuss this type of error in Unit 3 under errors that do not affect the trial balance.

### 3.5 Suspense Account

As earlier mentioned in section 3.4, the suspense account is a temporary account where the difference between the debit side and the credit side of the trial balance is placed until the error(s) that caused the difference is/are detected and corrected.

### 3.6 Illustrative Example

The trial balance of Lifestyle Ltd shows a deficit of $\$ 780$ on the credit side and this difference was posted to a suspense account. Upon examination of the records, the following errors were discovered.
a. Purchases day book was overcast by N 100
b. Bank charges of $£ 220$ which was entered in the cash book have not been posted to the bank charges account.
c. A sale of goods to Kennedy for $\$ 2,300$ was correctly entered in the sales book but entered in the personal account as $£ 3,200$.

Required:
i. Identify the kind of errors above
ii. Show the requisite journal entries to correct these errors
iii. Write up the suspense account showing the correction of the errors

## Solution to illustrative example:

(i) (a) Casting error
(b) Omission of one side of the account
(c) Transposition error

| Date or <br> Item <br> no | Detail | Debit <br> $\sim$ | Credit <br> I |
| :---: | :--- | :--- | :--- |
| I | Suspense A/c <br> Purchases A/c <br> Being correction of purchases overcast | 100 | 100 |
| Ii | Bank charges A/c <br> Suspense A/c <br> Being corresponding entry of bank charges <br> correctly posted to the cash book | 220 | 220 |
| Iii | Suspense A/c <br> Kennedy A/c <br> Being correction of overstatement in a debtor's <br> personal account | 900 | 900 |

(iii)

Suspense A/C

| \# |  | Bal b/d | \# |
| :---: | :---: | :---: | :---: |
| Purchases | 100 |  | 780 |
| Kennedy | 900 | Bank charges | 220 |
|  | N1,000 |  | \$1,000 |

### 4.0 CONCLUSION

Trial balance is required as a prima facie evidence of the correctness of the postings done in the book-keeping process. But the trial balance will never balance if certain errors are committed and such errors are corrected by making use of suspense account. Nevertheless, even though certain errors are committed in the book-keeping process, the trial balance will still balance as we shall cover those special errors later in Unit 3.

### 5.0 SUMMARY

A trial balance provides the list of all debit and credit balances and its accuracy is tested by comparing the totals of the debit and credit sides. Any difference points out the existence of error in the book-keeping process. Principle of accounting practice requires that such errors
should be investigated, detected and corrected. A suspense account is used to hold the error temporarily and to make the necessary corrections when the errors are detected. Other special errors that cannot be detected by the trial balance are examined in Unit 3.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Name and explain three errors that affect the trial balance. How would you correct these errors?
2. What is a suspense account? What are the type of errors that cannot be correct using the suspense account?
3. What is a trial balance? How is it different from ledger accounts?
4. Once a trial balance balances, it shows that the book-keeping process is free from error. Rationalise the authenticity of this assertion.

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

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## UNIT 3

## TRIAL BALANCE II: SPECIAL KIND OF ERRORS

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Trial Balance and Special Kind Of Errors
3.2 Errors That Do Not Affect The Trial Balance
3.3 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Having examined errors that affect the trial balance in Unit 2, this Unit 3 examines special kind of errors. These errors are special because they go unidentified by the trial balance in that the trial balance will balance even though they are committed in the book keeping process. In this Unit, we shall look at these sets of error and undertake a comprehensive illustration.

### 2.0 OBJECTIVES

Upon completion of this Unit, the student is expected to be able to identify, explain and correct the errors that do not affect the trial balance. The student should be able to use journal entries and ledger accounts to make the necessary corrections.
3.0 MAIN CONTENT

### 3.1 Trial Balance And Special Kind Of Errors

### 3.2 Errors That Do Not Affect The Trial Balance

The trial balance provides a necessary but not usually a sufficient evidence of the accuracy of the recording and postings passed through the ledgers because certain errors go undetected by the trial balance. In other words, the trial balance will still balance irrespective of the existence of these errors. These are error of omission, error of commission, error of principle, (complete) reversal error, error of prime/original entry and compensating error. These errors point to the fact that the equality of the totals on the credit and the debit sides of the trial balance does not provide sufficient evidence that the trial balance is error-free. Unlike errors that affect the trial balance, these errors are not corrected using the suspense account but through the individual accounts affected by the errors.
i. Error of omission: This error occurs when the recording of a particular transaction is completely omitted from the books or in the book-keeping process. For example, the purchases of $¥ 20,000$ from Lady Cheryl was omitted from the books. This transaction can be corrected using a journal and ledger as follows.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\#$ | Credit <br> $\cap$ |
| :--- | :--- | :---: | :---: |
|  | Purchases A/c <br> Lady Cheryl A/c <br> Being correction of transactions completely omitted | 20,000 | 20,000 |


| Dr | Purchases A/c | Cr |  |
| :--- | :---: | :--- | :--- |
| Lady Cheryl | A |  |  |


ii. Error of original entry: This occurs when a wrong figure is recorded from the source document and the double entry of this wrong entry is made in the ledger accounts, which makes it impossible for the trial balance to detect the existence of such an error. A simple example will illustrate this. If Johnny-Just-Come introduced additional capital of \#127,500 into the business and this is recorded in the cash book and capital account as \#12,750, this error can be corrected as follows: Dr Cash A/c and Cr Capital A/c with the difference.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\AA$ | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Cash A/c <br> Capital A/c <br> Being correction of capital of N127,500 <br> erroneously entered in the books as N17,500 | 114,750 | 114,750 |


| Dr | Cash A/c |  | Cr |
| :--- | :---: | :---: | :---: |
| Capital | A |  |  |


| Dr | Capital A/c |  |
| :---: | :---: | :---: |
|  |  | Cr |
|  | Cash | A |
|  |  | 114,750 |

A special kind of error of original entry relates to the error of transposition of digits in a figure in which the double entry of the erroneously transposed figure is carried out. Unlike the transposition error we discussed in Unit 2 in which the transposed figure only affected
one side of the double entry, the transposition error in this case affects both sides of the double entry. Let us reconsider our example of transposition error in Unit 2 where credit sales of $\$ 808,000$ was credited to sales a/c as $\pm 880,000$. In that example, we held that the correct amount was debited to accounts receivable $\mathrm{A} / \mathrm{c}$ with the following accounting and journal entries: Dr Sales A/c with $\$ 72,000$ and Cr Suspense A/c with $\$ 72,000$.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\#$ | Credit <br> $\#$ |
| :--- | :--- | :---: | :---: |
|  | Sales A/c <br> Suspense A/c <br> Being correction of sales of N808,000 recorded as <br> N880,000 | 72,000 | 72,000 |

But if this transposition error affects both accounts receivables and sales $\mathrm{A} / \mathrm{cs}$, then such transposition error will not affect the balancing of the trial balance and the need for suspense account does not arise. The accounting entries and journal entries would then be as follows: Dr Sales A/c with $\ddagger 72,000$ and Cr Accounts receivable A/c with $¥ 72,000$.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\AA$ | Credit <br> $\AA$ |
| :--- | :--- | :---: | :---: |
|  | Sales A/c <br> Accounts receivable A/c <br> Being correction of credit sales of N808,000 <br> recorded as N880,000 in the respective accounts | 72,000 | 72,000 |


| Dr | Accounts Receivable A/c |  |  | Cr |
| :---: | :--- | :---: | :---: | :---: |
|  | Sales | $\mathbf{\#}$ |  |  |
|  |  | 72,000 |  |  |


| Dr | Sales A/c |  | Cr |
| :--- | :---: | :---: | :---: |
| Accounts Receivable | 72,000 |  |  |

iii. Error of principle: This error occurs when an entry is made to the wrong account of a different class. For example, a nominal account item debited to a real account. When a motor vehicle running expenses of $\pm 50,000$ is debited to motor vehicle account, an error of principle is committed as these accounts belong to different classes. In order to correct this error, you Dr motor vehicle running expenses $\mathrm{A} / \mathrm{c}$ and Cr motor vehicle $\mathrm{A} / \mathrm{c}$.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\cap$ | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Motor vehicle running expenses A/c <br> Motor vehicle A/c <br> Being correction of error of principle | 50,000 | 50,000 |


| Dr | Motor Vehicle Running Expenses A/c | Cr |
| :--- | :---: | :---: |
| Motor Vehicle | 50,000 |  |
|  |  |  |


| Dr | Motor Vehicle A/c |  |
| :---: | :--- | :---: |
|  | Cr |  |
|  | Motor vehicle running expenses 50,000 |  |

iv. Error of commission: This error occurs when an entry is made to the wrong account of the same class. For example, the amount of trade debt owed by Josebed is entered as debt owed by Joseph. While both accounts are personal accounts of the same class, the error is committed by treating the debt of one person as that of another. Other example of this error is where an insurance expense of $¥ 150,000$ incurred is treated as rent expense. Whereas both
accounts are nominal accounts, the individual accounts are different. This error is corrected as follows:

Journal

| Date or <br> Item <br> no | Detail | Debit <br> $\mathbf{N}$ | Credit <br> $\mathbf{N}$ |
| :--- | :--- | :---: | :---: |
|  | Insurance A/c <br> Rates and rent A/c <br> Being correction of error of commission | 150,000 | 150,000 |


| Dr | Insurance A/c |  | Cr |
| :--- | :---: | :--- | :---: |
| Rates and rent | 150,000 |  |  |


v. Compensating error: This error occurs when an error or a combination of errors made on the debit side is cancelled out by an error or a combination of errors made on the credit side. Compensating error might arise, say, if accounts payable is overstated by $\$ 100,000$ (credit entry) is compensated for by an overstatement of expenses by $\$ 100,000$ (debit entry). The correction would be done as follows: Dr Accounts payable $\mathrm{A} / \mathrm{c}$ and Cr Expenses A/c.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Accounts payable <br> Expenses <br> Being correction of overstated accounts payable <br> compensated for by overstated expenses | 100,000 | 100,000 |



But if the error arising from expenses derives from a combination of the overstatement of salaries by $\pm 65,000$ and interest expense by $\$ 35,000$, the following entries would be made to correct the errors: Dr Accounts payable A/c with $¥ 100,000$ and Cr Salaries A/c with $£ 65,000$ and Cr Interest expense $\mathrm{A} / \mathrm{c}$ with $£ 35,000$.

Journal

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Accounts payable A/c  <br>  Salaries A/c <br>  Interest expense A/c <br> Being correction of overstatement of accounts <br> payable compensated for by expenses | 100,000 |  |


| Dr | Accounts Payable A/c |  | Cr |
| :--- | :---: | :--- | :--- |
|  | N |  |  |
| Salaries | 65,000 |  |  |
| Interest expense | 35,000 |  |  |



| Dr | Interest Expense A/c |  |
| :---: | :---: | :---: |
|  | Accounts payable | $\mathbf{~ C r}$ |
|  |  | 35,000 |

vi. Error of complete reversal of entries: This error occurs where the correct amount is entered into the correct accounts except that the amount is entered on the wrong side of the accounts or simply, the entries are reversed. A good example is where cash purchases of $\mathrm{N} 115,000$ is debited to the cash book and credited to purchases account. In order to correct this error, you need to enter the amount twice on to the correct side of the respective accounts. Whereas the first entry on the correct side reverses the wrong posting (i.e., cancels the error made), the second entry on the correct side simply records the transaction the right way it should have been originally done. Our example above would be treated as follows: Dr Purchases A/c with $\ddagger 230,000$ and Cr Cash A/c with $\mathrm{N} 230,000$. See the journal entries and ledger accounts below:

Journal

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Purchases A/c <br> Cash A/c <br> Being the cancellation of complete reversal of <br> entries | 115,000 | 115,000 |
|  | Purchases A/c <br> Cash A/c <br> Being the correct entry after cancellation of error of <br> complete reversal of entries | 115,000 | 115,000 |

More simply and appropriately, the journal entries should be made as below:
Journal

| Date or <br> Item <br> no | Detail | Debit <br> N | Credit <br> N |
| :--- | :--- | :---: | :---: |
|  | Purchases A/c <br> Cash A/c <br> Being the cancellation and correction of error of <br> complete reversal of entries | 230,000 | 230,000 |



### 3.3 Illustrative Example

The following errors were later discovered in the books of Olorunleke Brothers even though its trial balance balanced:
i. Purchases of $£ 21,000$ on credit from Jimmy King had been entered in Jimmy Chung A/c.
ii. A cheque of $¥ 13,200$ paid for rent was entered on the cash column of the cash book instead of the bank column.
iii. Sales on account of $\$ 16,500$ to Uyi Technical had been entered in error in Uyi Engineering's A/c
iv. Equipment purchased at $\# 96,970$ cash entered in the correct accounts in error as \#96,790.
v. A cheque of $¥ 256,800$ paid to Angelica Plc was debited to the bank $\mathrm{A} / \mathrm{c}$ and credited to Angelica Plc A/c.
vi. A sale of motor vehicle for $\pm 57,700$ had been entered in the sales A/c.
vii. Cash withdrawn from bank $¥ 50,000$ had been entered on the credit side of the cash column and debit side of the bank column.
viii. Purchase of goods for resale $\ddagger 92,000$ was entered in error in machinery A/c.
ix. Cash of $£ 500,000$ invested into the business by the owner was completed omitted from the books.

Required:
a. Identify the types of error above.
b. Journalise the entries to correct the above errors.

## SOLUTION

## (a)

i. Error of commission
ii. Error of commission
iii. Error of commission
iv. Error of original entry and transposition error. Note that this error is considered as error of original entry because the question stated that the transposed figure was entered in the two accounts involved. Had this not been the case, the error would only be transposition error.
v. Error of complete reversal of entries
vi. Error of principle
vii. Error of complete reversal of entries
viii. Error of principle
ix. Error of omission
(b)

| Date or Item no | Detail | Debit N | Credit N |
| :---: | :---: | :---: | :---: |
| i | ```Jimmy Chung A/c Jimmy King A/c To correct purchases on account from Jimmy King wrongly credited to Jimmy Chung``` | 21,000 | 21,000 |
| ii | Cash A/c <br> Bank A/c <br> To correct cheque payment for rent entered as cash payment | 13,200 | 13,200 |
| iii | Uyi Technical A/c <br> Uyi Engineering A/c <br> Being the correction of credit sales to Uyi Technical entered in error to Uyi Engineering | 16,500 | 16,500 |
| iv | Equipment A/c <br> Cash A/c <br> To correct error in respect of equipment purchased at $\# 96,970$ but entered in both accounts as $\# 96,790$ | 180 | 180 |
| v | Angelica Plc A/c <br> Bank A/c <br> Being the correction of complete reversal error relating to liability payment | 513,600 | 513,600 |
| vi | Sales A/c <br> Motor vehicle disposal A/c <br> To correct the disposal of non-current asset entered in error as sales | 57,700 | 57,700 |
| vii | Cash A/c <br> Bank A/c <br> Being correction of error of complete reversal relating to cash withdrawn from bank | 100,000 | 100,000 |
| viii | Purchases A/c <br> Machinery A/c <br> To* correct error involving purchases entered in machinery A/c | 92,000 | 92,000 |
| ix | Cash A/c <br> Capita A/c 1 <br> Being* the correction of owner invested cash completely omitted from the books | 500,000 | 500,000 |

[^0]
### 4.0 CONCLUSION

This Unit examined special errors which do not affect the trial balance and so complements the treatment of errors that affect the trial balance as discussed in Unit 2. There is need for these errors to be corrected otherwise the financial statements will be incomplete and misleading.

### 5.0 SUMMARY

There are two broad groups of errors namely, errors that affect the trial balance and errors that do not affect the trial balance. Errors that do not affect the trial balance when committed do not distort the equality of the totals on the debit and credit sides of the trial balance and so are usually very difficult to discover. Upon discovery, these errors must be corrected accordingly.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. List and explain six errors that do not affect the trial balance. In addition, state the accounting entries for correcting these errors.
2. The following errors were later discovered in the books of Olorunleke Brothers even though its trial balance balanced:
i. Sales of $\mathbb{£} 50,000$ on credit to Jimmy King had been entered in Jimmy Chung A/c.
ii. A cash of $\neq 13,200$ paid for rent was entered on the bank column of the cash book instead of the cash column.
iii. Purchases on account of $¥ 16,500$ from Uyi Technical had been entered in error in Uyi Engineering A/c
iv. Equipment sold at $\$ 96,970$ cash entered in the correct accounts in error as N96,790.
v. A cheque of $¥ 256,800$ received from Angelica Plc was credited to the bank A/c and debited to Angelica Plc A/c.
vi. A motor vehicle originally held for resale was sold for $£ 57,700$ and had been entered in the sales A/c. Any error here?
vii. Cash deposit into the bank $¥ 50,000$ had been entered on the debit side of the cash column and credit side of the bank column.
viii. Purchase of machinery for resale $¥ 92,000$ was entered in error into machinery A/c.
ix. Cash of 1500,000 withdrawn the business owner was completed omitted from the books.

Required:
a. Identify the types of error above (if any).
b. Journalise the entries to correct the above errors.

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

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## UNIT 4

## CURRENT ASSETS AND CURRENT LIABILITIES

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Current Assets and Current Liabilities
3.2 Assets and Liabilities
3.3 Current Assets
3.4 Current Liabilities
3.5 Illustrative Example
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit introduces students to assets and liabilities that have an expected life cycle not exceeding one accounting year. A number of items that fall within these concepts will be discussed as well as their recording in the books of account and the statement of financial position.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to distinguish between current assets and current liabilities. The student is also expected to also know the accounting entries for these transactions and how they are recognised in the statement of financial position.

### 3.0 MAIN CONTENT

### 3.1 Current Assets and Current Liabilities

### 3.2 Assets and Liabilities

According to International Accounting Standards Board (IASB's) conceptual framework for the preparation and presentation of financial statements, asset is "a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity." Assets could be classified as tangible and intangible, current and non-current. A liability on the other hand according to the IASB's conceptual framework is "a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits."

### 3.3 Current Assets

4.3 Current assets: These are assets that have the capacity to generate economic benefits to an entity within one financial year. This means that these assets have a short life span as they are expected to change their form within one financial year. Common examples of current assets are inventories, trade and non-trade accounts receivables, prepayments, shortterm investments, bank and cash balances. These shall now be discussed in turn.
(i) Inventories: Inventories are generally referred to as the unsold portion of goods held for resale. What constitutes inventories depends on the nature of the business of an entity. Purchases give rise to inventories when the goods purchased are not fully sold in the period. However, non-current assets such as motor vehicle, plant and equipment, land and building, for example, might equally be regarded as purchases and ultimately inventories by firms that
deal on buying and selling them. For example, estate developer will regard buildings acquired for the purpose of resale as purchases and ultimately inventories if unsold in the particular accounting period. Students should not be confused about this. What constitutes a non-current asset to a firm depends on what it does with that asset.

There are three basic types of inventories namely, raw materials, work-in-progress (or semifinished goods) and finished goods. Whereas a manufacturing firm will obviously have these three types of inventories, a merchandising firm (i.e., a firm that buys and sells) which does not engage in manufacturing will only have inventories of finished goods. Basically, these different classes of inventories are given the same accounting treatments as current assets in the books and statement of financial position. If an entity has raw materials $¥ 15,000$, work-in-progress $¥ 23,000$ and finished goods $¥ 19,000$, the entity's inventories that will be entered in the statement of financial position will be $\$ 57,000$ (i.e., $15,000+23,000+19,000$ ). For the accounting entries, you Dr Inventories A/c and Cr Trading account A/c.

The emphasis of inventories here is on the closing inventories as the opening inventories are invariably sold during the reporting year.
(ii) Accounts receivables: These are amounts owed an entity by its debtors for which they are expected to pay the entity within one financial year. Accounts receivables are basically of two types: trade accounts receivable and non-trade accounts receivable. Trade accounts receivable derives from debtors created by an entity by selling goods or rendering services to its customers on credit. Non-trading accounts receivable represents all short-term debts owed to an entity by those with whom it engages, which does not derive from selling goods or rendering services. Examples of non-trading accounts receivable include rent receivable, commission receivable, interest receivable, dividend receivable.
(iii) Prepayments: These are expenses paid but their benefits relate to future accounting period not more than one year. For example, when an entity pays rent of $\$ 180,000$ for 18
months period, the first $¥ 120,000$ relates to the current financial year while the remainder $\pm 60,000$ relates to the next accounting year. The $£ 60,000$ represents prepayment. Due to matching concept, the $¥ 120,000$ will be charged as an expense to the statement of profit or loss in the current financial year, whereas a current asset account will be created for the $\pm 60,000$ unexpired expense and will be included as part of current assets in the statement of financial position. We shall consider prepayments in greater detail in Unit 8 .
(iv) Short-term investments: Apart from purchasing long-term investments, an entity may also purchase short-term investments which are usually highly liquid, that is, they are easily convertible into cash. Short-term investments are those investments purchased by an entity, which has a life span not exceeding one financial year. Examples of such investments are treasury bills, treasury certificates and any other form of investments that has a maximum life span of one year. Such investments mature for liquidation or sale within one accounting year. The accounting entries for the purchase of short-term investments are: Dr Investments $\mathrm{A} / \mathrm{c}$ and Cr Cash/Bank A/c. For example if an entity purchases treasury certificates of $\$ 200,000$ by cheque and sold $¥ 120,000$ portion of it during the year, the accounting entries would be as follows:

| Dr | Treasury Certificates A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \# |  | \# |
|  |  | Bank | 120,000 |
| Bank | 200,000 | Bal. c/f | 80,000 |
|  | N200,000 |  | N200,000 |
| Bal. b/f | \#80,000 |  |  |

It is only the $¥ 80,000$ that qualifies as a current asset for the purpose of the statement of financial position.
(v) Bank and cash balances: These represent the monies held in the bank and cash tills of an entity. They are an important part of the current assets of any business entities as they constitute the primary means for making purchases and settling all financial obligations. The
balances of these accounts are extracted from the cash book. While both cash and bank balances could be current assets, sometimes bank balance could be a current liability if the entity has overdrawn its account (i.e., overdraft). We shall discuss overdraft later under current liabilities.

### 3.4 Current Liabilities

These are liabilities owed by an entity that fall due within one financial year. In other words, such liabilities are expected to be paid or settled within the next accounting year. Common examples of current liabilities are trade and non-trade accounts payable, accrued expenses (or accruals), cash received in advance (deferred income), short-term bank loans, bank overdraft and tax payable. These are now discussed in turn.
(i) Accounts payable: These are amounts an entity owes its suppliers and others in the course of its business activities. Such liabilities are usually expected to be paid within one accounting year. The distinction between trade and non-trade accounts payable is only necessary when an entity has other accounts payable that are not trade-related. Trade-related or trade accounts payable represents the liability of an entity to its suppliers of goods and services that form the core of the entity's primary activities. For example, the amount an entity owes its suppliers of raw materials and goods for resale constitutes trade accounts payable. But where the entity purchases equipment for use paid for in part by cash and the balance due in less than one year, that balance constitutes non-trade accounts payable.
(ii) Accrued expenses: These are simply also referred to as accruals. They are the expenses incurred by an entity in the current accounting year but not yet paid for. For example, an entity incurred $\# 80,000$ for rent and rates but has only made a payment of $\pm 60,000$. The entire $\$ 80,000$ will be charged to the statement of comprehensive income even though $¥ 20,000$ has not been paid. This $¥ 20,000$ represents a current liability which the
entity is expected to pay within the next accounting year. We shall discuss accounting for accruals in detail in Unit 8 .
(iii) Cash received in advance: Sometimes an entity may receive cash in advance for services to be rendered, or sales to be delivered, at a future date. As the entity has not earned that income until a future date, such income is considered as deferred income and as such it is treated as part of current liabilities. But when the income is earned in the future, the amount is then transferred from liability to sales or revenue.
(iv) Short-term loans: These are short-term credit facilities usually granted by financial institutions to an entity and the repayment term period does not exceed one financial year.
(v) Bank overdraft: Overdraft arises when the entity draws more cash from its bank account than it actually has with the bank because of the pre-arranged and agreed terms between the bank and the entity to overdraw its account whenever necessary. Usually, the entity pays bank charges and interests for using this facility.
(vi) Other current liabilities: These include corporate tax payable, dividend payable, unremitted pension contribution and unremitted employees' pay as you earn (PAYE). However, the first two items are not relevant to sole proprietorship and partnership forms of business. Moreover, the portion of long-term liabilities that falls due within one accounting year equally constitutes a current liability. For example, if an entity took a 5\% long-term loan of $\# 1$ million repayable equally over a period of 10 years, at the end of the first year $\$ 100,000$ will be regarded as a current liability whereas the balance $\# 900,000$ which would fall due after more than one year will be regarded as a long-term liability.

### 3.5 Illustrative Example

This section provides a proforma extract of statement of financial position involving current assets and current liabilities. We shall present an extract of statement of financial position using the following data of EtukNsit as at 30th June, 2016:

|  | n |
| :--- | :---: |
| Accrued rent | 50,000 |
| Accrued salaries | 45,500 |
| Prepaid insurance | 22,000 |
| Inventories | 550,000 |
| Accounts receivable | 214,000 |
| Accounts payable | 164,000 |
| Rent receivable | 35,000 |
| Bills receivable | 12,000 |
| Income in advance | 23,800 |
| Bank overdraft | 55,000 |
| Cash | 23,400 |
| Treasury bills | 38,800 |
| Long-term loan | 120,000 (\#24,000 falling due in December, 2016) |

## Solution

## EtukNsit

Extract statement of financial position as at 30 June 2016

$$
\# \quad \# \quad \ddagger
$$

Non-current assets:
Current assets:


### 4.0 CONCLUSION

This Unit started off by providing the definitions of assets and liabilities based on the conceptual framework of IASB. Current assets and current liabilities were conceptually examined and supported with the aid of examples.

### 5.0 SUMMARY

Current assets are those assets that their life span or economic-generating capacities expire within one accounting year whereas current liabilities are those liabilities that fall due within one accounting year as they require outflow of assets within one year. Both are presented in the statement of financial position as they are unexpired assets and liabilities.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Using five examples, explain the term current assets.
2. What do you understand by current liabilities? Name and explain three examples of current liabilities.
3. Formulate four hypothetical current assets with figures and do the same for current liabilities and then produce an extract statement of financial position.
4. Differentiate accounts payable from accounts receivable.
5. Explain your understanding of prepaid expenses and accrued expenses. In addition, explain the effects on the statement of comprehensive income and statement of financial position.

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

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## UNIT 5

## LONG-TERM LIABILITIES AND OWNERSHIP EQUITY

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Long-term liabilities and ownership equity
3.2 Long-term liabilities
3.3 Ownership equity
3.4 Illustrative Example
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Business entities carry out their business operations by using current assets (see Unit 4) and non-current assets (see Unit 11), a combination of which represents the asset structure in the statement of financial position. But these assets are usually funded through long-term (longterm liability and equity) and short-term (current liabilities - see Unit 4) sources of fund. These sources of fund combine to represent the financial structure of the statement of financial position. Our emphasis in this Unit is on the long-term sources of fund, which also represents the capital structure of the statement of financial position. However, long-term sources of fund cannot be used interchangeably with long-term liabilities as the former comprises both long-term liabilities and proprietary or ownership interest.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to distinguish between long-term liabilities and ownership equity. Similarly, the student should be able to explain the difference between long-term sources of fund and long-term liabilities. The student is also expected to explain what drawings mean and its effects on equity.

### 3.0 MAIN CONTENT

### 3.1 Long-term Liabilities and Ownership Equity

### 3.2 Long-term liabilities

Generally speaking, another name for liability is debt. A liability, according to the IASB's conceptual framework, is "a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity resources embodying economic benefits." Long-term liabilities comprise all long-term sources of fund other than those contributed by or attributable to the owners of the business. The nature and size of the entity will determine the different types of long-term liabilities it has in its statement of financial position. A sole proprietorship form of business may not have any long-term liabilities, while the ones that have may simply have long-term loan (probably from bank). Corporate entities (companies) on the other hand will usually have different types of longterm liabilities such as:
i. Debenture: It is a term loan with a fixed rate of interest and long-term maturity date and it is usually traded on the stock market.
ii. Mortgage loan: This is a long-term loan usually taken for the purpose of acquiring properties (buildings).
iii. Other long-term loans: For example, long-term bank loans.

Generally, these long-term liabilities have certain common features such as long-term maturity/repayment period and fixed or fluctuating rate of interest. Some of these long-term
debts or liabilities may be secured or unsecured. A secured liability is one in which the debt is tied to certain asset(s) of the borrowing entity. For example, a loan secured against a firm's warehouse building. In the event that the firm is unable to repay the loan, the creditor takes possession of the warehouse building and sells it to recoup his money. Or, when the company is liquidated, the amount realised from the warehouse will first by applied in repaying the creditor whose credit facility is secured against the building before using the balance to pay other creditors. Unsecured liability on the other hand means that the debt is not tied to any particular asset of the borrowing entity. This makes unsecured debt more risky to the lender than a secured one. Furthermore, long-term debts may also have the feature of convertibility. Convertible debt is the one that can be converted into share capital of a company whereas non-convertible debt does not have the option of convertibility. Moreover long-term liabilities usually have redemption feature. This means that debts may be redeemable or in rarity irredeemable. Redeemable debts are those that have a repayment (or redemption) period, which may be 10,20 or other years, depending on the agreed loan tenure. Irredeemable debts are those debts that are perpetual and have no liquidation or repayment date. However, if such debts are traded on the stock market, the debt holder could sell them and transfer ownership (and risk) to the debt buyers.

Long-term debts are treated under long-term liabilities in the statement of financial position distinct from equity.

### 3.3 Ownership Equity

Equity represents the ownership interest in a business entity. Generally, this refers to capital which represents the amount contributed by or attributable to the owners of the business for carrying out the business operations. For a sole proprietorship business, for example, the ownership equity will comprise the capital plus net profit/(loss) less drawings ( $\mathrm{C}+\mathrm{P} /(\mathrm{L}$ ) D). For a partnership business, equity comprises the partners' capital accounts plus partners'
current accounts. Equity of a company or corporate entity is more complex as it includes: share capital, share premium, revenue and capital reserves, retained profit, different sinking funds, and revaluation surplus reserve.

### 3.4 Drawings

Drawings are basically found in the books of sole proprietorship and partnership as a result of owners' withdrawal of goods, cash or other assets from the business for private use. If owners withdraw any form of assets from the business, this invariably reduces its capital or ownership equity/interest in the business. However, because the capital account is a permanent account, the drawings are not directly charged against or deducted from the capital account, instead, a drawings account is created as a debit account while the corresponding assets are credited with the value withdrawn. The drawings are then deducted from the equity section in the statement of financial position. Accounting entries for assets withdrawn from business for private use are:
a. Cash: Dr Drawings a/c and Cr Cash/Bank a/c
b. Goods: Dr Drawings a/c and Cr Purchases a/c
c. Non-current assets: Dr Drawings a/c and Cr Non-current assets a/c

Although drawings are evident in the books of sole proprietorship and partnership, it is subtle with respect to companies. A sole proprietor may withdraw cash for personal use because he is self-employed and not paid any salary by the business. If the proprietor converts that business to a limited company for example, he can pay himself salary as a director without the remuneration been regarded as drawings. He can also be entitled to dividend, that is, the income he receives as a result of shares he holds in the company. But when a sole proprietorship withdraws from its profit, the drawings are not charged to profit the way dividend is deducted from net profit. You will appreciate this subtle and intricate situation in a higher level course. So never worry at this time!

### 3.5 Illustrative example

Use the data below to prepare statement of financial position extracts for:
(a) A sole proprietorship
(b) A limited liability company

Ordinary share capital $\ddagger 200,000$
Share premium $£ 500,000$
Retained earnings $\mathbf{N 2 3 0 , 0 0 0 ( a f t e r ~ a d j u s t i n g ~ f o r ~ n e t ~ p r o f i t ~ f o r ~ t h e ~ y e a r ) ~}$
Capital reserve $\$ 340,000$
Capital $\# 150,000$
Net profit $¥ 80,000$
Drawings: goods $\ddagger 6,000 ;$ Cash $¥ 25,000$
1 year term loan $\# 98,000$
Trade creditors $£ 66,500$
$10 \%$ Debentures $¥ 250,000$
Mortgage loan $¥ 87,000$

## SOLUTION

(a)

Extract statement of financial position (Sole Proprietorship)

## N

Financed by:
Capital
150,000
Add: Net profit
80,000
230,000
Less: Drawings
$(31,000)$
199,000

## (b)

Extract statement of financial position (A Limited Liability Company)

## N

Long-term liabilities:

| $10 \%$ Debenture | 250,000 |
| :--- | :--- |
| Mortgage Loan | 87,000 |

Capital and Reserve:

| Ordinary share capital | 200,000 |
| :--- | :---: |
| Share premium | 500,000 |
| Capital reserve | 340,000 |
| Retained earnings | 230,000 |

## NB:

- The 1 year term loan and trade creditors are current liabilities and so are disregarded here.
- Although sole proprietorship can borrow long-term loans, perhaps from banks, they neither have debentures which are tradable on the stock market they cannot access nor mortgage loan which are accessible by persons. The sole proprietor in his capacity as owner can take a mortgage but not his business. You might then ask, why would a company have a mortgage loan as part of its long-term liability? The simple reason is that a company is a person at law and enjoys the rights and privileges human beings enjoy, not without corresponding obligations.


### 4.0 CONCLUSION

In this Unit we have examined the broad long-term sources of finance entities use in financing their assets in the statement of financial position. These sources of fund comprise long-term debts and the equity fund of the owners of the business.

### 5.0 SUMMARY

This Unit discussed the two broad sources of long-term financing available to any business entities. Long-term sources of fund comprise long-term debts/liabilities and equity. Any entity must have, at the minimum, equity or capital in its capital structure. Capital structure represents the long-term sources of fund an entity has in its statement of financial position, whereas financial structure is said to be the composite long-term and short-term sources of fund in an entity's statement of financial position. Basically, the financial structure is a mirror image of the assets structure as the financial structure is equal to the assets structure.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What is the difference between long-term liabilities and equity?
2. Identify any three types of long-term liability and explain them.
3. How are long-term liabilities and equity related to the accounting equation?
4. Distinguish between the following:
a. Secured liabilities and unsecured liabilities
b. Redeemable debts and irredeemable debts
c. Interest and dividend
d. Dividend and drawings
e. Convertible debts and non-convertible debts

### 7.0 REFERENCES/FURTHER READING

Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education

Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 6

## REVENUE EXPENDITURE AND CAPITAL EXPENDITURE

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content3.1 Revenue Expenditure and Capital Expenditure3.2 Revenue Expenditure
3.3 Capital Expenditure
3.4 Some grey areas of capital and revenue expenditures
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Expenditure is the amount of money an entity spends to achieve a particular purpose, especially for generating revenues. No entities generate income or revenue without making expenditure. That is why every business entity commences operation with investment seed (capital) contributed by the business owner(s) to provide the resources the entity can draw on to make expenditure it can use to generate revenue. This Unit focuses on two broad categories of expenditure namely, capital and revenue, which have long-term and short-term implications for the entity's quest to achieving objectives of survival and profit maximisation.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to differentiate capital expenditure from revenue expenditure. The student should be able to identify and segregate capital expenditure from revenue expenditure from a list of business expenses as well as how they are treated in the income statement and statement of financial position.

### 3.0 MAIN CONTENT

### 3.1 Capital Expenditure and Revenue Expenditure

### 3.2 Capital Expenditure

This is an expenditure incurred by an entity and the benefit of which transcends one accounting year. This means that even though the expenditure is made in a particular accounting year, the benefits are not consumed in that year only. For the purpose of not charging too much cost to the profit or loss for that year, a portion of the capital expenditure estimated to have been consumed are charged to each of the periods over which the benefits are expected to cover. Capital expenditure or long-term expenditure is an investment in noncurrent assets, whether tangible or intangible. Examples are investment in tangible assets such as land and building, motor vehicle, equipment, plant and machinery, furniture. Examples of intangible assets include trademark, patent, copyright, development cost, mineral right, and mining license. As these assets generate benefits to the entity in more than one accounting period, they are expensed to the income statement through a process called depreciation, amortisation or depletion (see Units 9 and 10).

It is important for students to understand the accounting treatments of the costs of non-current assets. For example, having mentioned that land and buildings, motor vehicles, equipment, machineries are examples of non-current assets, the composition of the cost is usually more than the purchase price. The following are things that will constitute the cost of non-current
assets that would be capitalised (regarded as capital expenditure rather than revenue expenditure:

- Cost price
- Alteration/improvement cost
- Incidental freight cost
- Installation cost
- Incidental legal fees
- For asset built by the firm
- Material cost
- Labour cost
- Overhead cost (attributed expenses)
- Financing cost

The accounting entries for capital expenditure are similar to how expenses are generally entered into the books of accounts. When capital expenditure investment is made, say, for equipment, you Dr Equipment $\mathrm{A} / \mathrm{c}$ and Cr Cash or Bank A/c. When a portion of the expenditure on equipment is expensed to the profit or loss, the asset $\mathrm{A} / \mathrm{c}$ is not affect, instead you Dr Profit or loss $\mathrm{A} / \mathrm{c}$ and Cr Allowance for depreciation $\mathrm{A} / \mathrm{c}$ with the depreciation chargeable to income in that accounting period (See Units 9 \& 10). The allowance for depreciation is not credited to the asset account but only subtracted from the asset cost in the statement of financial position.

### 3.2 Revenue Expenditure

This is an expenditure incurred by an entity in the day-to-day running of the activities of the entity. Its benefits expire in the year it is incurred and therefore is charged in whole to the profit or loss $\mathrm{A} / \mathrm{c}$ in the year of occurrence. Examples of such expenses are wages and salaries, motor running expenses, electricity, advertising, repairs, travelling and
transportation, discounts allowed and interest expense. When revenue expenditure is made, you debit the particular revenue expenditure $\mathrm{A} / \mathrm{c}$ and credit cash/bank $\mathrm{A} / \mathrm{c}$.

### 3.4 Some grey areas of capital and revenue expenditures

However, students sometimes find it confusing as to how to treat certain expenditures that are associated with some non-current assets such as motor vehicle running expenses, repairs/refurbishment to non-current assets and replacement of parts. Motor vehicle running expense is not a capital expenditure but revenue expenditure and so must be kept separate from acquisition cost of motor vehicle. Repairs or refurbishment of non-current assets are usually revenue expenditure if they are meant to maintain the operating capacity of the assets or keep the assets in their productive state. But where the repairs/refurbishment are done to increase or enhance the operating capacity of the non-current assets which invariably benefits more than one accounting period, that expenditure will be capitalised. Similarly, the cost incurred in replacing a part of a plant to increase its productive capacity or extend the useful life of the asset will be regarded as a capital expenditure; but if the replacement is only to maintain the functionality of the asset the related cost is revenue expenditure.

### 3.5 Illustrative Examples

## Example 1

Group the following expenditure as capital or revenue expenditure:
(i) Purchase of machinery for business use
(ii) The cost of maintaining machinery
(iii)The cost of installing a new machinery
(iv) The cost of increasing the interior of new van to increase its carrying capacity
(v) The cost of acquiring mining license
(vi)The cost of acquiring copyrights
(vii) Cost of extending office building
(viii) Legal fees associated with office building extension
(ix) Office building insurance
(x) The cost of replacing tyres of old motor vehicles

## Example 2

The following data relate to Babatunde Ventures which engages in internet, printing and designing business:
(i) Purchase of six new computers at $\$ 20,000$ each for $¥ 110,000$ (net of quantity discount)
(ii) Purchase of cables for cabling the computer networking at $\pm 6,000$
(iii)Installation charge $¥ 8,000$
(iv) Acquisition of software for the computers $\$ 38,000$
(v) Purchases 2 printers at $¥ 15,000$ each
(vi) Computer consumables $¥ 7,500$
(vii) Computer servicing $\ddagger 3,500$

## Required:

(a) What is the amount of capital expenditure to be found in the statement of financial position?
(b) What is the amount of revenue expenditure chargeable to the statement of comprehensive income?

## SOLUTION

## Solution to Example 1

| Capital <br> Experience | Revenue <br> Experience |
| :--- | :--- |
| I | Ii |
| Iii | Xx |
| Iv |  |
| V |  |
| Vi |  |
| Vii |  |
| viii |  |

## Solution to Example 2

(a)

Computation of capital expenditure

|  |  |
| :--- | :--- |
|  |  |
| Cost of computers | 110,000 |
| Networking cables | 6,000 |
| Installation charge | 8,000 |
| Software costs | 38,000 |
| Printers $(2 \times 15,000)$ | $\underline{\underline{30,000}}$ |

(b)

Computation of revenue expenditure

|  | n <br> Computer consumables |
| :--- | ---: |
| 7,500 |  |
| Computer servicing | $\underline{3,500}$ |
|  | $\underline{11,000}$ |

### 4.0 CONCLUSION

Business entities usually incur both capital and revenue expenditures in order to be able to carry on the business of the entity on a daily basis and into the foreseeable future. These expenditures are complementary for the purpose of achieving business success and survival. Whereas the revenue expenditure only benefits one accounting period, the benefits arising from capital expenditure extend to more than one year.

### 5.0 SUMMARY

Revenue and capital expenditure are important costs incurred by business entities. When revenue expenditures are incurred, they are expected to produce benefits that will expire in the immediate accounting period and as a result the entire costs are expensed or written off to the profit or loss (or statement of comprehensive income). On the other hand, when capital expenditures are incurred, they are expected to produce benefits that will extend beyond the immediate accounting year in which they were incurred and as a result, the costs will be allocated to the number of years that are expected to benefit from them. Therefore, the expired portion of the capital expenditures is charged to profit or loss $\mathrm{A} / \mathrm{c}$, while the unexpired portion of the capital expenditures is recognised in the statement of financial position.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What are the two broad categories of expenditure in financial accounting?
2. Name and explain with examples the two major types of expenses.
3. Personal, nominal and real are the broad classes of account. Give four examples each of revenue expenditure and capital expenditure and classify them into their classes of account.

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education

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## UNIT 7

## BAD DEBTS AND ALLOWANCES FOR BAD DEBTS

## CONTENTS

### 1.0 Introduction

2.0 Objectives
3.0 Main Content
3.1 Discount Allowed, Bad Debts and Allowance for Doubtful Debts
3.2 Discount allowed
3.3 Bad Debts
3.4 Allowances for Doubtful Debts
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit discusses some manifest reality associated with business practices when entities strive to encourage sales to generate more revenues and ultimately profit. As revenue or income is necessary for business entities to thrive, they usually give concession to buyers to buy now and pay later, that is, buy on credit (trade credit). While this concession incentivises sales, it equally creates the risk of default in payment as it is usually unlikely that the entity will be able to recoup the entire amount of the credit sales it has made. This Unit therefore
examines the risk associated with credit sales namely, the probability that an entity will be unable to collect all those amounts of credit sales.

### 2.0 OBJECTIVES

It is expected that at the end of this Unit the student should be able to explain the concepts of bad debts and allowance for bad/doubtful debts as well as how they are accounted for. Students should also be able to explain the concept of cash discount in relation to account receivable created by credit sales.

### 3.0 MAIN CONTENT

### 3.1 Bad Debts and Provision/Allowance for Doubtful Debts

### 3.2 Discount Allowed

Entities encourage sales or customers patronage by selling goods on credit to buyers who have the potential capacity to pay in the future. Without this concession sales would be limited to only buyers who can pay at the point of buying. The implication is that other potential buyers who can buy now and pay in the future would be unable to buy when they are disposed to do so. By implication, potential sales revenue will reduce and current and potential future customer patronage would be undermined. As a conventional business practice, sales are made in cash and on credit. While credit sales are made in anticipation that the customers would pay at an agreed future dates, evidence has shown that not all the customers are able to pay as and when due. In order to encourage prompt payment by customers, an entity usually uses cash discounts as incentives to make the customers/debtors pay on time.

Cash discount, therefore, is the rebate or incentive given by an entity to its debtors (those to whom it sold goods, or rendered services, to on credit) in order for them to pay promptly. For example, an entity might give a rebate or discount to its debtors that if they pay their debt within certain number of days that such customers would be entitled to $2 \%$ or $5 \%$ discounts
as the case may be. Any debtors that pay within the incentive period pay a lower amount in full settlement of their debts, or else they make the full payment. If a $2 \%$ discount is offered to a trade debtor for $¥ 10,000$, the amount the debtor is expected to pay in full settlement of his debt is $\# 9,800(\$ 10,000-[10,000 \times 2 \%])$ after deducting $¥ 200$ discount. You can see that it has reduced the amount accruing to the seller compared to if the sales were made on cash. This is part of the price sellers pay for the risk associated with credit sales; however, discount allowed is a potential way of mitigating that risk by giving incentive to the customer to pay more promptly to take advantage of the discount offered. The good news is that credit sales encourages higher sales while cash discount encourages the prompt collectability of the debt created by credit sales as well as reduce the incidence or likelihood of bad and doubtful debts. The accounting entries for discount allowed are as follows: Dr Discount allowed A/c and Cr Accounts receivable $\mathrm{A} / \mathrm{c}$. The accounting entries of discount allowed in the financial statement are: Dr Profit or loss A/c and Cr Discount allowed A/c.

### 3.3 Bad Debts

As we have already established above that credit sales give rise to trade debtors or accounts receivable, it is also true that not all the debts are likely to be collected. The part of the debtors' figure that is not collectible or which the debtor will practically be unable to pay is called bad debt. Bad debts usually arise not because the debtors are not willing to pay their debts, but it may be due to a number of unforeseen circumstances at the time the transactions were contemplated. Just as it could happen to anyone who owes debt, default in repaying debt might occur unintentional due to certain adverse conditions facing the debtors. When it becomes apparent that certain debts owed by customers are not collectible, in other words have become bad, they have to be written off in that period from the balance in the accounts receivable and charged to the statement of profit or loss. The accounting entries when trade debts become bad are: Dr Bad debts $\mathrm{A} / \mathrm{c}$ and Cr Accounts receivable $\mathrm{A} / \mathrm{c}$. To record entries to
charge the trade bad debts to the income of the year, you Dr Profit or loss and Cr Bad debts A/c.

Because bad debts usually arise due to unanticipated circumstances by the debt customers, the customers might experience change in the financial fortunes that might eventually make them to pay their hitherto written off debt. When this happens, the bad debts will be regarded as bad debts recovered. To account for this, you Dr Cash/Bank A/c and Cr Bad debts recovered a/c. To close off this account, you Dr Bad debts recovered A/c and Cr Profit or loss $\mathrm{A} / \mathrm{c}$. Note that this amount will not be passed through the bad debts a/c any more. Because it has been written off as a recurrent expenditure in the profit or loss $\mathrm{A} / \mathrm{c}$ in the earlier year, the recovered debt will be taken as income in the profit or loss $\mathrm{A} / \mathrm{c}$ of the year it is recovered.

### 3.4 Allowance (or Provision) for Doubtful Debts

Section 3.4 suggests that certain trade debts could prove bad or permanently uncollectible. However, there is no guarantee that all the trade debts that are collectible would eventually be collected as some might prove bad in the future due to unforeseen circumstances. This means that the collectability of some of those debts are doubtful, hence the term doubtful debts. Based on experience, entities are able to develop a rule of thumb on how to not overstate the carrying amount of the trade debts or accounts receivable by making allowance for such doubtful debts. Provision simply means an estimated amount of potential loss or liability that is charged against the profit of the year to avoid overstatement of assets/profits or understatement liabilities/losses. The current conventional accounting term for provision is allowance. Because of the likelihood that some of the trade debts might prove bad in the future, prudence concept demands that the entity should provide or make allowance for such probable scenario. Business entities approach this problem by taking a case by case assessment and/or general assessment of the trade debts or accounts receivable. This will give rise to specific allowance for doubtful debts and general allowance for doubtful debts.

Specific allowances are made for trade debts when the entity is able to isolate out some trade debts attributable to certain customers and can approximately estimate the likelihood of noncollectability. These debts are separated from the total debts and a particular percentage of such debts are charged against profit or loss. On the other hand, general allowances are applicable to other debts or customers' debts in which the likelihood of their noncollectability is not discernible. Even though it is not obvious to doubt the collectability of such trade debts, it is conventionally appropriate and prudent for entities to make allowance for such debts. However, general allowances are usually lower than specific allowances because the level of uncertainty of the former is lower than the latter's.

### 3.4 Illustrative Examples

## Example 1

Egunje Enterprises has the following data relating to its accounts receivable as at 31st December 2015:
(i) Accounts receivable as per trial balance (before bad debts write-off) $£ 45,000$
(ii) Bad debts written off during the year $£ 1,500$
(iii) Allowance for doubtful debts is at $3 \%$ of debtors

Required: prepare the relevant accounts and extract of statement of financial position.

## Example 2

Modern Life Merchants makes allowance for doubtful debts on the basis of the age of the trade debts. The following data have been extracted at the financial year ending 31st March 2016:
(i) Allowance for doubtful debts as at 1st April 2015 is $\$ 3,300$
(ii) Allowance for discount allowed is at the rate of $2 \%$ for debt not exceeding 1 month and $0.5 \%$ for debt over 1 month and not exceeding 2 months.
(iii) Outstanding trade debts and related rates of allowance are as follows:

| Accounts receivable <br> $¥$ | Period outstanding | Allowance for <br> doubtful debts (\%) |
| :---: | :---: | :---: |
| 30,000 | Up to 1 month | 0.5 |
| 23,500 | Over 1 month and up to <br> 2 months | 1 |
| 42,000 | Over 2 month and up to <br> 3 months | 2 |
| 22,000 | Over 3 months | 3 |

Required:
(a) Calculate the allowance for discount allowed
(b)Calculate the allowance for doubtful debts
(c) Prepare the relevant ledger entries
(d)Prepare extracts of the statements of comprehensive income and financial position.

## Example 3

On 1st July 2014, Makela had accounts receivable of $£ 50,000$ on which he had made an allowance of $2 \%$. During the financial year, the following information emerged:
(i) Debt $¥ 2,000$ owed by Ian only realised $\# 700$ and the balance declared bad
(ii) Other bad debts written off during the year amounted to $\$ 4,300$
(iii)Bad debts written off in 2013 now recovered $¥ 800$
(iv) Accounts receivable balance as at 30th June 2015 is $\$ 58,500$ before adjusting for:
a. Trade debt of $\AA 1,800$ owed by Morgan is certified uncollectible
b. A number of cheques for $\ddagger 3,200$ received from debtors were dishonoured by the banks
c. Allowance of doubtful debts at $4 \%$

## Required:

Prepare the following accounts:
(i) Bad debts
(ii) Bad debts recovered
(iii)Allowance for bad debts

## SOLUTIONS

Solution to example 1

| Dr A | Accounts Receivable A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal. b/f |  | Bad debts | 1,500 |
|  | 45,000 | Bal. c/f | 43,500 |
|  | N45,000 |  | N45,000 |
| Bal. b/f | 窑43,500 |  |  |
| Dr | Bad Debts A/c |  | Cr |
| Accounts receivable | N | Profit or loss | N |
|  | able $\underline{\underline{1,500}}$ |  | $\underline{1,500}$ |
| Dr Allow | Allowance for Doubtful Debts A/c |  | Cr |
| Bal. c/f | \# | Profit or loss | A |
|  | 1,305 |  | 1,305 |
|  | N1,305 |  | \$1,305 |
|  |  | Bal. b/f | \# 1,305 |

## Egunje Enterprises

Statement of financial position extract as at 31st December 2015

|  | $\ldots$ | $\ldots$ |
| :--- | :---: | :---: |
| Accounts receivable | 43,500 |  |
| Less: allowance for doubtful debts | $\underline{(1,305)}$ | 42,195 |

(a)

## Computation of allowance for discount allowed

\#
Debts up to 1 month ( $30,000 \times 2 \%$ ) ..... 600
Debts over 1 month, not more than 2 months ( $23,500 \times 0.5 \%$ ) ..... 117.50
$\$ 717.50$
(b)
Computation of allowance for doubtful debts

|  | \# | N | N |
| :---: | :---: | :---: | :---: |
| Debts up to 1 month | 30,000 |  |  |
| Less: allowance for discount allowed | (600) | 29,400 |  |
| Allowance for doubtful debts (29,400 @ 0.5\%) |  |  | 147 |
| Debts over 1 month and not exceeding 2 months | 23,500 |  |  |
| Less: allowance for discount allowed | (117.50) | 23,382.50 |  |
| Allowance for doubtful debts (23,282.50 @ 1\%) |  |  | 233.83 |
| Debts over 2 months and not exceeding 3 months |  | 42,000 |  |
| Allowance for doubtful debts (42,000 @ 2\%) |  |  | 840 |
| Debts over 3 months |  | 22,000 |  |
| Allowance for doubtful debts (22,000 @ 3\%) |  |  | 660 |
| Total allowance for doubtful debts (approx.) |  |  | \# 1,881 |


| Dr | Accounts Receivable A/c |  | Cr |
| :--- | :--- | :--- | ---: |
| A |  | N |  |
| Bal. b/fl117.500 |  | Bal. c/f | $\underline{\underline{117.500}}$ |
| Bal. b/f | 117,500 |  |  |


| Dr | Allowance for Doubtful Debts A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal. c/f | $\underline{1,881}$ | Profit or loss | 1,881 |
|  |  | Bal. b/f | \#1,881 |


| Dr | Allowance for Discount Allowed A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | A |
| Bal. c/f | 717.50 | Profit or loss | 717.50 |
|  |  | Bal. b/f | \$717.50 |

(d)

## Modern Life Merchants

Statement of comprehensive income extract

## N

Allowance for doubtful debts
1,881
Allowance for discount allowed
717.50

## Modern Life Merchants

## Statement of financial position extract

## N

Accounts receivable
117,500
Less: Allowance for doubtful debts
$(1,881)$
Allowance for discount allowed
(717.50)

114,901.50

## Solution to Example 3

(i)

(ii)

| Dr | Bad Debts Recovered A/c |  | Cr |
| :--- | :---: | :--- | :---: |
| Profit or loss | $\underline{\mathrm{N}}$ |  | $\underline{\mathrm{N}}$ |
|  | Bank/Cash | $\underline{\underline{800}}$ |  |

(iii)


## Workings:

1. Allowance for doubtful debts at end of year:

## N

Original balance at end of year 58,500
Less: Morgan's bad debt $\quad(1,800)$
Add: Dishonoured cheques 3,200
Adjusted balance at end of year $\underline{\underline{59,900}}$
Allowance for doubtful debts at end of year (59,900 @ 4\%)

### 4.0 CONCLUSION

We have dealt with how trade debts are created in business entities through credit sales as well as the unintended incidences of such debts such as bad debts and doubtful debts.

### 5.0 SUMMARY

This Unit has examined not only how trade debts are created through credit sales, but also how bad and doubtful debts are the unintended consequences of such credit-giving decision. We have also looked at discount allowed as an entity's incentive used to mitigate the risk associated with the collectability of trade debts. This Unit has also highlighted the various accounting entries of these transactions.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Differentiate bad debts from doubtful debts.
2. What is an allowance for doubtful debts? What are the relevant ledger entries for doubtful debts and how is it recorded in the statement of profit or loss and statement of financial position?
3. Distinguish between specific and general bad debts. How does discount allowed and allowance for discount allowed affect the profit or loss and statement of financial position?

### 7.0 REFERENCES

Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education

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## UNIT 8

## ACCRUALS AND PREPAYMENTS

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Accruals and Prepayments
3.2 Expenses
3.2.1 Prepaid Expenses
3.2.2 Accrued Expenses
3.3 Income
3.3.1 Income in Advance
3.3.2 Income Due
3.4 Illustrative Example
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Based on accruals and matching concepts, revenues must be matched with expenses used to generate such revenues in any particular accounting period. Consequently, it does not matter whether or not cash has been received in relation to the revenues or cash paid in relation to the expenses. What matters is the recognition of the revenues as being already earned and the expenses as being already incurred. In the light of this, this Unit focuses on certain expenses
and revenues requiring adjustments at the end of the accounting year when the trial balance has already been extracted. They are end-of-year adjustments that are necessary to make for the completeness of the preparation and presentation of financial statements. Although there are several end-of-year adjustments such as allowance for depreciation, allowance for doubtful debts, allowance for inventories, accrued expenses, deferred income or income received in advance, tax provision, prepaid expenses, etc., this Unit will only focus on accruals and prepayments.

### 2.0 OBJECTIVES

After completing this Unit, the student should be able to explain accruals in the form of accrued income and accrued expense, distinguish between them, and know their accounting entries or treatments in the statement of comprehensive income and statement of financial position. It is equally expected of the student to be able to explain prepayments in the form of deferred income and prepaid expense, distinguish between them, and know their accounting treatments in the statement of comprehensive income and statement of financial position.

### 3.0 MAIN CONTENT

### 3.1 Accruals and prepayments

### 3.2 Expenses

Expenses are the amounts incurred by an entity for the purpose of earning income or revenue. For the purpose of determining whether the entity has made a profit or loss, the expenses must be charged against the revenues they generated in that same period. A profit represents the surplus of revenue over expenses while a loss is the excess of expenses over revenue. However, in a particular accounting period or at the trial balance date, not all the expenses have been fully paid for and in some other instances the expenses paid for relate to a future period other than the reporting accounting period. When shall now discuss these scenarios under accrued and prepaid expenses as follows.

### 3.2.1 Accrued expenses

These are expenses incurred by an entity in the current accounting period but has not been paid for. In other words, such expenses partly helped in generating the revenue in the accounting period and must of necessity form part of the expenses chargeable to the statement of comprehensive income (or profit or loss). For example, if insurance incurred by an entity in a financial year is $¥ 20,000$ but the firm has paid $¥ 17,000$ only, the entire N20,000 incurred during the year must be charged to the profit or loss account for the year. This means that the difference of $\$ 3,000$ which has been incurred but unpaid for must be included in the year's insurance expense to reflect the actual insurance expense for the year. The amount of accrued expense is a liability to the entity and a current liability as it is expected to be paid within one accounting year.

### 3.2.2 Prepaid expenses

These are amounts of expenses paid by an entity in an accounting period for which the benefits are expected to derive in the future. This means that although the expenses have been paid for, they have not been incurred (or consumed) because they do not relate to the current period but a future period. Because the expense has not generated any revenue it has to be accrued or deferred to the following accounting period when the entity will utilise it to generate revenue and that is when it would be charged to the statement of profit or loss. For example, if an entity paid a rent of $\$ 240,000$ for two years, only half of it $(\$ 120,000)$ relates to the current accounting period while the remainder relates to the next accounting period. The portion that relates to the next accounting period is the prepaid rent. As the amount has not been used up, it becomes an asset to the entity. This means that any prepaid expense is a current asset to the entity.

### 3.3 Income

Income is a vital element of the financial statement and the reason why any entities exist. Income is sometimes referred to as revenue and it is the amount received by an entity for selling goods and/or rendering services. Entities that engage in merchandising (i.e. buying and selling) have sales as their primary source of income. Such entities might receive income from other subsidiary services or activities such as rental income, income from the disposal of non-current assets, commissions and so on. Irrespective of the nature of the income, it is rare for entities to have received in cash all the income it generated in an accounting year. Much like expenses, three strands of reality manifest with respect to income: (i) income earned already received in cash (income received), (ii) income earned but yet to be received in cash (income receivable), (iii) income received in cash but not yet earned (income in advance or deferred income). Whereas the first needs no adjustment but charged to the profit or loss, the remainder two require end-of-year adjustment to be made to the relevant income accounts.

### 3.3.1 Income due/accrued

This is the amount of income earned in the accounting year for which cash is yet to be received. As long as the income has been earned (see Unit 14), it is recognised in the statement of comprehensive income of that year. This amount has been earned because the related sales have been made or services rendered, it constitutes part of an entity's current assets as it is expected to change its form into cash within one accounting period. For example, sales on credit for which cash is yet to be received at the accounting year end is added to the cash sales for the year and the portion yet to be paid by the customers give rise to a current asset called accounts receivable or debtors. If it relates to other income earned for which cash is yet to be received such as rent, commission, dividends, interest, etc., they are
generally treated as non-trade accounts receivables or individually as commission receivable, dividends receivable, rent receivable and interest receivable.

### 3.3.2 Income in advance or deferred income

On certain occasions, entities also receive cash in the current period for services they are to render or goods they are to deliver, in a future accounting period. Even though that amount has formed part of the income received during the year, that portion that relates to the future period must be subtracted so that it can be transferred to the future period to which it relates. In other words, the income is deferred to such period when every obligation involving earning the income crystallises. In as much as such obligations have not been performed, the cash received in advance amounts to a liability. It is a current liability as the fulfilment of the underlying obligation must be performed within the next accounting period. If an entity received in advance an amount of $£ 50,000$ for rental income, this amount will be subtracted from the total rental income received as it represents a current liability and not income in the current accounting period.

### 3.4 Illustrative Example

The following data of accruals and prepayments relate to APC for Change, a trading entity located in PDP State of INEC Republic:

Balances as at 30th June 2015:
Rent prepaid $\ddagger 58,000$
Salaries accrued N 45.300
Commission received in advance $\$ 14,500$
Electricity prepaid $¥ 24,000$
Balances as at 30th June 2016:
Outstanding rent $\ddagger 36$,200
Prepaid salaries $\ddagger 38,750$

Commission in arrears $£ 26,300$
Electricity prepaid $\$ 12,000$
During the accounting year, APC for Change recorded the following transactions:
Paid rent of $£ 254,000$ by cheque
Paid Salaries of $£ 578,000$ through bank transfer
Commission received $\$ 98,760$ by Cash
Electricity paid by cash $¥ 87,000$

## Required:

(a) Prepare the respective ledger entries of the above transactions in the books of APC for Change.
(b) Prepare an extract of the statement of comprehensive income (profit or loss $\mathrm{A} / \mathrm{c}$ ) for the year ending 30th June 2016
(c) Prepare an extract of the statement of financial position as at 30th June 2016.

## SOLUTION

(a) (One approach)

| Dr | Rent A/c |  | Cr |
| :--- | ---: | :--- | ---: |
|  |  |  |  |
| Bal. b/f (1/7/2015) | 58,000 |  |  |
| Bank | 254,000 |  |  |
| Bal. c/f (30/6/2016) | $\underline{36,200}$ | Profit or Loss | $\underline{\underline{348,200}}$ |
|  | $\underline{\$ 348,200}$ | Bal. b/f (1/7/2016) | $\cong 36,200$ |


| Dr | Salaries A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bal. b/f (1/7/2015) | 45,300 |
|  |  | Profit or Loss | 493,950 |
| Bank | 578,000 | Bal. c/f (30/6/2016) | 38,750 |
|  | N578,200 |  | N578,000 |
| Bal. b/f (1/7/2016) | + 38,750 |  |  |


| Dr | Commission A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bal. b/f (1/7/2015) | 14,500 |
|  |  | Cash | 98,760 |
| Profit or Loss | 139,560 | Bal. c/f (30/6/2016) | 26,300 |
|  | \#139,560 |  | \#139,560 |
| Bal. b/f (1/7/2016) | \#26,300 |  |  |


(a) (Alternative approach)

Alternatively, the rent transactions could be accorded the following ledger entries: rent prepaid $\mathrm{A} / \mathrm{c}$, rent $\mathrm{A} / \mathrm{c}$ and rent accrued $\mathrm{A} / \mathrm{c}$.


| Dr | Rent A/c |  | Cr |
| :--- | :---: | :--- | ---: |
|  | N |  |  |
| Rent prepaid | 58,000 |  |  |
| Bank | 254,000 |  |  |
| Accrued rent | $\underline{36,200}$ | Profit or Loss | $\underline{\underline{348,200}}$ |
|  | $\underline{\underline{N 348,200}}$ |  |  |


| Dr | Accrued Rent A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal. c/f (30/6/2016) | 36,200 | Rent | $\underline{36,200}$ |
|  |  | Bal. c/f (1/7/2016) | N 36.200 |

Alternatively, the salaries transactions could be accorded the following ledger entries: accrued salaries A/c, salaries A/c and prepaid salaries A/c.


| Dr | Salaries A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Accrued salaries | 45,300 |
|  |  | Profit or Loss | 493,950 |
| Bank | 578,000 | Prepaid salaries | 38,750 |
|  | \$578,000 |  | ⑤78,000 |


| Dr | Prepaid Salaries A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Salaries | $\underline{38,750}$ | Bal. c/f (30/6/2016 | $\underline{\underline{38,750}}$ |
| Bal. b/f (1/7/2016) | \#38,750 |  |  |

Alternatively, the commission transactions could be accorded the following ledger entries: deferred commission $\mathrm{A} / \mathrm{c}$, commission $\mathrm{A} / \mathrm{c}$ and commission receivable $\mathrm{A} / \mathrm{c}$.

| Dr | Deferred Co | mission A/c | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Commission | $\underline{14,500}$ | Bal. b/f (1/7/2015) | $\underline{14,500}$ |
| Dr | Commission A/c |  | Cr |
| Profit or Loss | N |  | N |
|  |  | Deferred commission | 14,500 |
|  |  | Cash | 98,760 |
|  | 139,560 | Commission receivable | 26,300 |
|  | \$139,560 |  | \#139,560 |


| Dr | Commission Receivable A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  | $\underline{N}$ |  | N |
| Commission | $\underline{26,300}$ | Bal. c/f $(30 / 6 / 2016$ | $\underline{\underline{26,300}}$ |
| Bal. b/f (1/7/2016) | $\underline{ \pm 26,300}$ |  |  |

Alternatively, electricity transactions could be accorded the following ledger entries: prepaid electricity $\mathrm{A} / \mathrm{c}$ and electricity $\mathrm{A} / \mathrm{c}$.

| Dr | Electricity Prepaid A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  | N |  | N |
| Bal. b/f (1/7/2015) | 24,000 | Electricity | 24,000 |
| Electricity | $\underline{12,000}$ | Bal. c/f (30/6/2016) | $\underline{12,000}$ |
|  | $\underline{N 36,000}$ |  | $\underline{N 36,000}$ |
| Bal. b/f (1/7/2016) | $\underline{N 12,000}$ |  |  |


| Dr | Electricity A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Electricity prepaid | 24,000 | Profit or Loss | 99,000 |
| Cash | 87,000 | Electricity prepaid | $\underline{12,000}$ |
|  | N111,000 |  | \#111,000 |

(b)

## APC for Change

Statement of comprehensive income Extracts for year ended 30th June 2016

$$
\mathrm{N} \quad \mathrm{~N}
$$

Sales
Cost of sales
Gross profit
Other income:
Commission
139,560

Less expenses:

| Rent | $(348,200)$ |
| :--- | :--- |
| Salaries | $(493,950)$ |
| Electricity | $(99,000)$ |

(c)

## APC for Change

Statement of financial position Extracts as at 30th June 2016

|  | Non-current assets |
| :--- | :--- |
| Current assets |  |
| Prepaid electricity | 12,000 |
| Prepaid salaries | 38,750 |
| Commission receivable | 26,300 |
| Current liabilities |  |
| Accrued rent | 36,200 |

### 4.0 CONCLUSION

We have examined the concepts and mechanics of accruals and prepayments as important constituents of end of year adjustments necessary in the preparation of an entity's financial statements.

### 5.0 SUMMARY

This Unit provided lucid explanations and accounting treatments of the concepts relating to accruals and prepayments namely, prepaid expenses, accrued expenses, income received in advance (deferred income) and income in arrears (income receivable) and how they are
reflected in the statement of financial position and their effect on expenses and income recognised in the statement of profit or loss.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you understand by accruals and prepayments.
2. Why are prepayments and accruals end of year adjustments?
3. The following data of accruals and prepayments were extracted from the books of Life Packaging Enterprises:

Balances as at 30th June 2015:

Rent prepaid $\ddagger 37,000$
Salaries accrued $\ddagger 35,100$
Commission received in advance $\mathbf{N} 21,000$
Electricity prepaid $¥ 17,700$
Balances as at 30th June 2016:

Prepaid rent $£ 28,400$
Accrued salaries $¥ 25,890$
Commission received in advance $£ 18,525$
Accrued electricity $¥ 7,820$
During the accounting year, the entity recorded the following transactions:
Paid rent of $£ 84,060$ by cheque
Paid Salaries of $£ 57,700$ through bank transfer

Commission received $\ddagger 62,100$ by Cash
Electricity paid by cash $¥ 25,030$
Required:
(a) Prepare the respective ledger entries of the above transactions..
(b) Prepare an extract of the statement of comprehensive income (profit or loss $\mathrm{A} / \mathrm{c}$ ) for the year ending 30th June 2016
(c) Prepare an extract of the statement of financial position as at 30th June 2016.
4. What do you understand by deferred income?

### 7.0 REFERENCES

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

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## UNIT 9

## DEPRECIATION I: INTRODUCTORY CONCEPTS AND METHODS

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Introductory Concepts and Methods of Depreciation
3.2 Depreciation and its Basic Concepts
3.3 Methods of Depreciation (including relevant illustrations)
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

In order to understand what depreciation is and how it is measured, it is important to understand some fundamental concepts associated with the term. Such concepts include noncurrent asset and cost, depreciable value, residual/scrap value, written down value or carrying cost and accumulated depreciation. All these terms shall be discussed in this Unit. The discussion of this Unit is limited to depreciable assets. Depreciable asset is a non-current asset that is a subject of depreciation and whose value likely diminishes with usage or over time. Examples of a depreciable asset are building, machinery, equipment, motor vehicle, etc. A non-depreciable asset is not a subject of depreciation of which land is a typical example. When the costs of land and building are conflated, only the cost of the building will be subjected to depreciation. For example, if the cost of land and building is $\$ 10.5$ million
(where the cost of land is $£ 2$ million), the value of the depreciable asset will be $£ 8.5$ million (i.e., $\mathrm{N} 10.5-\mathrm{N} 2$ million).

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to explain depreciation and basic concepts related to it such as depreciable value, scrap/residual value, carrying cost, useful life, and depreciable asset. The student should also be able to identify and explain a number of depreciation methods and classify them into time-based and non-time-based. In addition, the student should be able to compute depreciation using the different methods identified.

### 3.0 MAIN CONTENT

### 3.1 Introductory Concepts and Methods of Depreciation

### 3.2 Depreciation and its Basic Concepts

Depreciation is the process of allocating the cost of tangible non-current asset over its estimated useful life as expense to the income statement. As we discussed in Unit 6, the costs of non-current assets are treated as capital expenditure and cannot be fully expensed in the period of their purchase because several accounting years would benefit from their use. Consequently, each of those periods is charged with a portion of the cost of the asset by using an appropriate method of depreciation chosen by the firm. Depreciation in accounting is only a cost allocation process. However, there are a number of misconceptions about depreciation. First, it is viewed as the reduction or wear and tear in the value of an asset as a result of usage, passage of time or obsolescence. While wear and tear likely underpins the rationale for depreciation, it does not coincide with accounting view of depreciation as a merely cost allocation process or expensing approach because what constitutes depreciation is not necessarily consistent with the amount of wear and tear associated with the usage of a noncurrent asset. Second, depreciation is also misconstrued as the money set aside for the replacement of a non-current asset. Depreciation usually does not involve setting aside
money for replacing the asset. Where an entity utilises depreciation as a means to set aside money to specifically replace an asset, such process is called funding depreciation. This contrasts with depreciation which is an accounting process of recording and measuring an expense, whereas a funded depreciation is a purely financing function in which the money set aside is not available for business operation but invested in securities outside the business until such future time when it would be used to purchase a new asset.

In order for an entity to account for depreciation, it adopts one or more methods of depreciation such as straight-line, reducing balance, sum of the years' digit, unit of production, and machine hours. Before we discuss these methods very shortly, it is important we familiarise ourselves with a number of depreciation-related concepts which are asset useful life, cost, salvage value, depreciable value, accumulated depreciation, written down value (or carrying cost).

### 3.2.1 Useful life

This is the period of time the non-current asset is expected to generate benefit to the entity that acquired it. It is usually an estimated period based on the accounting policy the entity adopts for the purpose of charging depreciation, which usually varies among entities as well as classes of non-current assets. Usually, building will have an estimated useful life longer than plant and machinery. However, the physical life of the asset may not necessarily coincide with the estimated useful life for the purpose of depreciation. For example, the estimated useful life of a building may be 20 years whereas the physical life of the building may extend beyond 100 years. Estimating the useful life of an asset is highly subjective but business entities consider the usage of the asset, technological changes and other factors in carrying out the estimation. Apart from relating the estimated useful life of an asset to a number of years, we can also relate it to months, units of production, or machine hours.

### 3.2.2 Cost

This is the amount incurred to purchase the non-current assets plus other incidental costs incurred for the purpose of bringing the asset to the point it can be productively engaged to generate economic benefits to the entity. For example, the cost of plant and machinery will include the purchase price, freight and its associated insurance, installation cost, legal charges (if any). If an entity purchases a building for business use, the cost will include the purchase price, legal and agency fees, alteration cost and any other costs incurred to enhance the useful life and productive capacity of the asset.

## Exhibit 9.1

Look-and-See Ventures acquired a machinery with a list price of $¥ 50,000$ for $¥ 40,000$. Other costs incurred with respect to the asset are: installation cost $\# 2,000$, incidental legal fees \#1,000, freight and freight insurance $\# 500$. The cost of the machinery will be equal to $¥ 43,500$ (i.e., $¥ 40,000$ it costs to buy the asset, installation cost of $¥ 2,000$, legal fees of $\# 1,000$ and the freight cost of $\# 500$ ). The list price is immaterial as the price at which the vendor sold the asset to the entity is $¥ 40,000$.

### 3.2.3 Salvage value

The salvage value also known as scrap value or residual value is the amount the non-current asset will realise after its estimated useful life. For example, if our machinery that costs N43,500 has a useful life of 5 years and can be sold after 5 years for $\# 5,500$, it means that the scrap value is $\# 5,500$. For the purpose of depreciation, this amount is not chargeable as part of depreciation expense neither is it recognised as an income until the asset is eventually sold after the expiration of its estimated useful life.

### 3.2.4 Depreciable value

Depreciable value is the difference between the cost of the non-current asset and its residual value. Mathematically, it is $\mathrm{DV}=\mathrm{C}-\mathrm{S}$, where $\mathrm{DV}=$ depreciable value, $\mathrm{C}=\operatorname{cost}$ and $\mathrm{S}=$
residual/scrap/salvage value. Using the example in section 3.2.3, $\mathrm{DV}=\ddagger 43,500-\nexists 5,500=$ $\# 38,000$. Conceptually, the depreciable value represents the portion of the non-current asset that can be expensed or allocated as annual depreciation charges over the useful life of the asset irrespective of the method of depreciation adopted.

### 3.2.5 Accumulated depreciation

This is the cumulative amount of depreciation charge of the cost of a non-current asset. If our machinery above is allocated equally over its useful life of 5 years, the annual depreciation charge will be $\nexists 7,600$ (i.e., $\# 38,000 / 5$ ). The accumulated depreciation at the end of the following years will be:

Table 9.1: A schedule of accumulated depreciation

| Year | Annual <br> depreciation <br> $\ldots$ | Accumulated <br> depreciation <br> $\ldots$ |
| :--- | :--- | :--- |
| 1 | 7,600 | 7,600 |
| 2 | 7,600 | 15,200 |
| 3 | 7,600 | 22,800 |
| 4 | 7,600 | 30,400 |
| 5 | 7,600 | 38,000 |

### 3.2.6 Written down value

This is also known as carrying cost/value/amount or net book value. The carrying amount of a non-current asset represents the difference between its cost and accumulated depreciation. Mathematically, this is WDV $=\mathrm{C}-$ Acc Dep, where WDV is carrying cost or written down value or net book value, C is cost, and Acc Dep is accumulated depreciation. The following table will derive from using our machinery example above:

Table 9.2: A complete depreciation schedule

| Year | Cost <br> \# <br> (a) | Annual depreciation N <br> (b) | Accumulated depreciation N <br> (c) | $\begin{gathered} \text { WDV } \\ \\ (\mathrm{a}-\mathrm{c}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 43,500 | 7,600 | 7,600 | 35,900 |
| 2 | 43,500 | 7,600 | 15,200 | 28,300 |
| 3 | 43,500 | 7,600 | 22,800 | 20,700 |
| 4 | 43,500 | 7,600 | 30,400 | 13,100 |
| 5 | 43,500 | 7,600 | 38,000 | 5,500 |

As you will observe from Table 9.2, the value at the end of year 5 is equal to the residual value. This is so because the residual value is not included as part of the depreciable value that is depreciated or allocated as expense over the useful life of the asset.

### 3.3 Methods of Depreciation (including relevant illustrations)

Whereas relevant illustrations are carried out here on each method, a comprehensive example covering all the methods discussed would be undertaken in Unit 10.

### 3.3.1 Straight-line method

This is a method of depreciation that allocates the depreciable value of a non-current asset equally over its useful life. It is represented as:

$$
\text { Depreciation }=\frac{\text { Cost }- \text { Residual value }}{\text { Useful life }}
$$

Each period within the useful life of the asset bears the same amount of depreciation. The amount of depreciation charged is based on a proportion of years or percentage. A noncurrent asset that has a useful life of 10 years will have a percentage rate of $10 \%$ (i.e., $1 / 10 \mathrm{x}$ 100). Using similar mechanics, 5 years useful life equals $20 \%$ (i.e., $1 / 5 \times 100$ ). For example,
if an motor van is acquired for $\mathrm{N} 55,000$ with an estimated useful life of 5 years and the residual value of $\mathrm{N} 5,000$, the annual depreciation charge will be:

Annual depreciation $=\frac{\$ 55,000-\$ 5,000}{5}=\$ 10,000$ The major advantage of using this method is it easiness of computation. A major disadvantage of this method lies in its failure to recognise that though cost are allocated equally over the useful life of the asset, the asset apparently incurs more maintenance or running cost at the later years of its useful life than at the early years. Consequently, the combined costs associated with the asset (depreciation and running cost) will be smaller at the beginning than towards the end of the asset's useful life.

### 3.3.2 Reducing balance method

This method is also referred to as written down value method. It is one of the two accelerated methods of depreciation that charges larger amount of depreciation to the early years of the asset than later years. Reducing balance method applies a fixed percentage rate on the written down value or carrying cost of a non-current asset over its useful life. The method is easy to apply when the rate of depreciation is given. If the rate is not given, it can be calculated using the formula below:

$$
r=1-\sqrt[n]{s / c}
$$

Where: $r=$ fixed percentage rate; $s=$ salvage value; $c=\operatorname{cost} ; \mathrm{n}=$ estimated useful life. If a motor vehicle that cost $£ 17,150$ has a useful life of 5 years and a residual value of $£ 500$, calculate the annual depreciation rate.

$$
\begin{aligned}
& r=1-\sqrt[5]{500 / 17,150} \\
& r=1-\sqrt[5]{0.029} \\
& r=1-0.49=0.51 \text { or } 51 \%
\end{aligned}
$$

### 3.3.3 Sum of the years' digits

This is the second variant of the accelerated method of depreciation that charges higher rate of depreciation to early years than later years. Under this method, the various years of the estimated useful life are aggregated and used as the denominator in a fraction. For example, if the estimated useful life of an asset is 5 years, the sum of the years' digits will be 15 (i.e., $1+$ $2+3+4+5$ ). The rate of depreciation for each of the 5 years will be

Table 9.3: Sum of the years' digit [rate]

| Year | Rate of depreciation |
| :--- | :--- |
| 1 | $5 / 15$ |
| 2 | $4 / 15$ |
| 3 | $3 / 15$ |
| 4 | $2 / 15$ |
| 5 | $1 / 15$ |

It may be cumbersome to calculate the sum of the years' digits using this mechanical approach. This can be calculated using the formula below:

SYD $=n(n+1) / 2$ where SYD is the sum of the years' digits and n is the estimated useful life. We will get the same answer when we use this formula to calculate our initial example.

$$
\text { SYD }=5(5+1) / 2
$$

$$
30 / 2=15
$$

Let us apply this to an asset that has an estimated useful life of 50 years.
$S Y D=50(50+1) / 2$
$2550 / 2=1,275$

The annual depreciation expenses based on the sum of the years' digits for a non-current asset with the following data: Cost $\mathrm{N} 55,000$, scrap value $\mathrm{N} 5,000$, useful life 5 years.

Table 9.4: Sum of the years' digit [depreciation computation]

| Year | Rate of <br> depreciation | Depreciable <br> Value <br> N | Annual <br> depreciation <br> N |
| :---: | :---: | :---: | :---: |
| 1 | $5 / 15$ | 50,000 | 16,667 |
| 2 | $4 / 15$ | 50,000 | 13,333 |
| 3 | $3 / 15$ | 50,000 | 10,000 |
| 4 | $2 / 15$ | 50,000 | 6,667 |
| 5 | $1 / 15$ | 50,000 | 3,333 |

### 4.0 CONCLUSION

Depreciation of non-current assets is the process of allocating the cost of these assets as an expense to the profit or loss over the useful of the assets. This is important because all costs used in generating revenue must be charged to revenue generated to avoid overstatement of profit. Because depreciation is an estimate based on an entity's policy, different methods of depreciation may be applied by different entities or different methods applied to different non-current assets. Three methods of depreciation have so far been discussed while other will be examined in Unit 10.

### 5.0 SUMMARY

Depreciation is a cost-allocation process in accounting and not necessarily the technical conception that it is the wear and tear arising from the use of a non-current asset. A number of concepts associated with depreciation have been identified such as cost, scrap value, depreciable value, carrying amount, accumulated depreciation, useful life as well as the methods of depreciation. The methods of depreciation examined in this Unit are: straight-line, reducing balance and sum of the years' digits.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What is depreciation?
2. Identify some of the misconceptions associated with depreciation.
3. Identify and explain with examples three methods of depreciation.

### 7.0 REFERENCES/FURTHER READING

Anthony, R. N., Hawkins, D. F., \& Merchant, K. A. (2007). Accounting: texts and cases, 12th edition, Boston: McGraw Hill Education.

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## UNIT 10

## DEPRECIATION II: FURTHER ISSUES AND ACCOUNTING ENTRIES CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Further Issues on Depreciation and Its Accounting Entries
3.2 Non-time-based Methods of Depreciation
3.3 Amortisation and Intangible Assets
3.4 Depletion and Natural Resources
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Having looked at the basic concepts of depreciation and time-based or time-related methods of depreciation in Unit 9, this Unit examines non-time-related methods of depreciation, amortization and depletion.

### 2.0 OBJECTIVES

After studying this Unit, the student should be able to make the necessary accounting entries for depreciation. The student is expected to be able to identify and explain non-time related basis of depreciation. In addition, the student should be able to name and explain the
alternative concept of depreciation used for intangible assets and wasting assets or natural resources.

### 3.0 MAIN CONTENT

### 3.1 Further Issues on Depreciation and Its Accounting Entries

### 3.2 Non-time-based Methods of Depreciation

### 3.2.1 Unit of production method

This method of depreciation is only appropriate for depreciating productive assets such as plant and machineries based on the estimation of the units of output it is capable of producing over its productive life. It allocates the depreciable value of the non-current asset over the different periods of its useful life based on the number of outputs produced in each of those periods. The formula for calculating depreciation under the unit of production method is as follows:

$$
\text { Depreciation }=\left(\left(\frac{\text { Cost-Residual value }}{\text { Estimated total units of output }}\right) \mathrm{x} \text { units produced in a period }\right)
$$

For example, if a machinery that costs $£ 100,000$ has a scrap value of $¥ 10,000$ and the capacity to produce 500,000 units of output, the depreciation charge for a period that produced 40,000 units will be:

$$
\begin{aligned}
& \text { Depreciation }=\left(\left(\frac{\mathrm{N} 100,000-\mathrm{N} 10,000}{500,000}\right) \times 40,000\right) \\
& \text { Depreciation }=\left(\frac{\mathrm{N} 90,000}{500,000} \times 40,000\right) \\
& \text { Depreciation }=N 7,200
\end{aligned}
$$

### 3.2.2 Machine-hour rate method

Like the unit of production method, this method is also useful in depreciating productive assets such as plant and machinery. This method allocates the depreciable value of a noncurrent asset based on the hours the machine is put into use in the relevant accounting
periods. As a given, the estimate of the total hours the machine can operate over its operating life is known and that constitutes its productive capacity. Any hours in which the machine is utilised in a given accounting year would form the basis of allocating the asset's depreciable value. This is akin to the unit of production method earlier discussed. If you replace units of output in section 3.2.1 above with machine hours, you will get a depreciation charge for the year based on 40,000 machine hours worked as $¥ 7,200$.

$$
\text { Depreciation }=\left(\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total machine hours }}\right) \times \text { machine hours in a period }\right)
$$

### 3.2.3 Revaluation method

This method values the non-current asset at both the beginning and end of a period and the difference between the opening and closing values represents the depreciation for the year. It is appropriate for valuing a group of assets such as loose tools, crates, or containers but not suitable for large assets such as buildings, plant and machineries, equipment. In determining the amount to be allocated as depreciation, regard must be given to the items purchased during the year. For example, if the following data relates to the activities of a bottling company in Lagos State, what would be its depreciation expense for the period?

| Opening value of crates | $\pm 50,000$ |
| :--- | :--- |
| Crates purchased during the year | $\pm 120,000$ |
| Value of crates at year end | $\pm 130,000$ |

## Solution

| Opening value of crates | $\pm 50,000$ |
| :--- | :--- |
| Add: Purchased crates | $\pm \underline{120,000}$ |

### 3.2.4 Accounting entries for depreciation

Irrespective of the methods of accounting for depreciation adopted the accounting entries remain the same. This does not mean that the amount of depreciation will be identical but the manner the debits and credits are treated are identical. Since we have established that depreciation is a cost allocation process, it therefore means that the cost allocated to each accounting period is an expense. As you are already aware, expenses are charged or debited to profit or loss. Which account would therefore be credited? Is it the non-current asset account? Not at all! This is a bit subtle. Never mind, it is a simple process. The accounting entries are as follows:

When depreciation is estimated or ascertained:
Method 1:
Dr Depreciation A/c and Cr Allowance for depreciation A/c
Dr Profit or loss A/c and Cr Depreciation A/c
Method 2:
Dr Profit or loss A/c and Cr Allowance for depreciation A/c
As you can see from the accounting entries, depreciation is not subtracted, or more technically credited to the non-current asset a/c. Rather, the depreciation or accumulated depreciation is only adjusted to the non-current asset in the statement of financial position, except when the non-current asset is disposed of (see Unit 11).We shall provide a detail accounting entries in our illustrative example later on.

### 3.3 Amortisation and Intangible Assets

Amortisation is similar to depreciation as it is to intangible assets as depreciation is to tangible non-current assets. It is the allocation of the cost of intangible asset over its
estimated useful life. Examples of intangible assets include patent, trademark, copyright, goodwill, mineral license, etc.

### 3.4 Depletion and Natural Resources

Natural resources are wasting assets such as oil, gas, coal, sand quarry, and other minerals that are extracted from their natural settings. As natural resources are extracted, their reserves diminish because they are exhaustible or non-renewable resources/assets. Because these assets are long-term assets, accounting measurement requires that a portion of the costs of the assets is charged to income statements over the useful life of the assets. The process of allocating the cost of a wasting asset to the different accounting periods that are expected to benefit from it is called depletion. The term depletion is akin to depreciation but it is usually associated with natural resources or wasting assets. Unlike depreciation in which a number of methods could be used to allocate the cost over an asset's useful life, the usual method of doing so with respect to depletion is the units of production method.

Depletion $=\left(\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total units of output }}\right) \mathrm{x}\right.$ units extracted in a period $)$
Where $\left(\frac{\text { Cost-Residual value }}{\text { Estimated total units of output }}\right)$ is the depletion rate per output extracted.

### 3.5 Illustrative Examples

Example 1
AYZ Ventures acquired a machinery costing $¥ 300,000$ and the machinery has a useful life of 5 years and a residual value of $£ 20,000$. The expected productive capacity of the machinery is as follows:

| Year | Units | Machine hours |
| :---: | :---: | :---: |
| 1 | 25,000 | 50,000 |
| 2 | 20,000 | 80,000 |
| 3 | 18,000 | 95,000 |
|  |  | 105 |

Total 88,000 440,000

Required:
(i) Calculate the depreciation charge for year 1 and 2 using the following methods:
a. Straight-line
b. Reducing balance
c. Sum of the years' digits
d. Unit of production
e. Machine hour
(ii) Prepare the relevant ledger entries and statement of financial position extracts based on (i)a above.

## Example 2

Adamu oil and gas acquired an oil reserve with a capacity of 10 million barrels of oil for $\pm 200 \mathrm{~m}$ in 2012. The firm's policy uses a depletion rate of $\ddagger 20$ per barrel extracted.

Required:
Calculate the depletion charges for the following years:

| Year | Barrels produced |
| :--- | :--- |
| 2013 | 500,000 |
| 2014 | 800,000 |
| 2015 | $1,200,000$ |

## SOLUTION

Solution to Example 1

## AYZ Ventures

(i)a

Computation of depreciation based on straight-line basis.

$$
\begin{aligned}
\text { Annual Depreciation }= & \frac{\text { Cost-Residual value }}{\text { Useful life }} \\
& \frac{\# 300,000-\# 20,000}{5} \\
& \frac{\# 280,000}{5} \\
& \# 56,000
\end{aligned}
$$

Depreciation for: Year $1=\$ 56,000$

$$
\text { Year } 2= \pm 56,000
$$

The depreciation charges for year 1 and 2 are equal because the straight-line method allocated depreciation on equal basis over the useful life of the non-current asset.
(i) b

Computation of depreciation using reducing balance method
Depreciation $=$ Carrying amount/WDV $x$ depreciation rate .
Since reducing balance method can only be computed if the rate of depreciation is known, we need to first of all determine that depreciation rate by applying the following formula:
$r=1-\sqrt[n]{s / c}$
Where: $\mathrm{r}=$ fixed percentage rate; $\mathrm{s}=$ salvage value; $\mathrm{c}=\operatorname{cost} ; \mathrm{n}=$ estimated useful life.
$=1-\sqrt[5]{\# 20,000 / N+300,000}$
$1-\sqrt[5]{\frac{\# 20,000}{N 300,000}}$
$1-\sqrt[5]{0.667}$
$1-0.92$
0.08 or $8 \%$

Depreciation for:

$$
\begin{aligned}
& \text { Year } 1=\$ 300,000 \times 8 \%=\$ 24,000 \\
& \text { Year } 2=(\$ 300,000- \pm 24,000) \times 8 \% \\
& \mathrm{~N} 276,000 \times 8 \%=\mathrm{N} 22,080 \\
& \text { Year } 3=(\$ 300,000- \pm 24,000-\mathrm{N} 22,080) \times 8 \% \\
& \mathrm{~N} 253,920 \times 8 \%=\mathbb{N} 20,314
\end{aligned}
$$

## (i) c

Computation of depreciation using sum of the years' digits:
$\mathrm{SYD}=n(n+1) / 2$
Where SYD is sum of the years' digits and n is the estimated useful life.
$S Y D=5(5+1) / 2$
SYD $=30 / 2=15$

Depreciation charger for:
Year $1=\frac{5}{15} \times 280,000=\$ 93,333$
Year $2=\frac{4}{15} \times \$ 280,000=\$ 74,667$

Do not forget that the depreciation charge is applicable to the depreciable value which is the difference between cost and residual value.
(i) d

Computation of depreciation based on unit of production method:

Depreciation $=\left(\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total units of output }}\right) \times\right.$ units produced in a period $)$
Depreciation/unit $=\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total units of output }}\right)$
$\left(\frac{\$ 300,000-\mathrm{N} 20,000}{88,000}\right)$
$\left(\frac{\mathrm{N} 280,000}{88,000}\right)$
N3.182/unit
Depreciation charge for:
Year $1=\$ 3.182 /$ unit $\times 25,000=\$ 79,550$
Year $2=\$ 3.182 /$ unit $\times 20,000=\# 63,640$

> (i) e

Computation of depreciation based on machine hour method:
Depreciation $=\left(\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total machine hours }}\right) \times\right.$ machine hours in a period $)$
Depreciation/hour $=\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total machine hours }}\right)$
$\left(\frac{\mathrm{N} 300,000-\mathrm{N} 20,000}{440,000}\right)$
$\left(\frac{\text { \#280,000 }}{440,000}\right)$

> A0.637/hour

Depreciation charge for:
Year $1=\mathrm{N} 0.637 /$ hour $x 50,000=\mathrm{N} 31,850$

Year $2= \pm 0.637 /$ hour $x 80,000=\$ 50,960$
(ii)

## Relevant accounting entries

| Dr | Machinery A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Year 1 |  | Year 1 |  |
| Bal. b/f | 300,000 | Bal. c/f | 300,000 |
|  | \#300,000 |  | \#300,000 |
| Year 2 |  | Year 2 |  |
| Bal. b/f | N300,000 | Bal. c/f | N300,000 |
| Year 3 |  |  |  |
| Bal. b/f | \#300,000 |  |  |


| Dr | Allowance for Depreciation A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Year 1 |  | Year 1 |  |
| Bal. c/f | 56,000 | Profit or loss A/c | 56,000 |
|  | N56,000 |  | N56,000 |
| Year 2 |  | Year 2 |  |
|  |  | Bal. b/f | 56,000 |
| Bal. c/f | 112,000 | Profit or loss A/c | 56,000 |
|  | N112.000 |  | N112.000 |
|  |  | Year 3 |  |
|  |  | Bal. b/f | \# 112,000 |

Alternative accounting entries of depreciation charges: The two accounts below are prepared instead of only one (allowance for depreciation $\mathrm{a} / \mathrm{c}$ ) as in above.

| Dr | Depreciation A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \# |  | \# |
| Year 1 |  | Year 1 |  |
| Allow. for dep A/c | 56,000 | Profit or loss A/c | 56,000 |
|  | +56,000 |  | N56,000 |
| Year 2 |  | Year 2 |  |
| Allow. for dep A/c | 56,000 | Profit or loss A/c | 56,000 |
|  | N56,000 |  | N56,000 |


| Dr | Allowance for Depreciation A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Year 1 |  | Year 1 |  |
| Bal. c/f | 56,000 | Depreciation A/c | 56,000 |
|  | N56,000 |  | N56,000 |
| Year 2 |  | Year 2 |  |
|  |  | Bal. b/f | 56,000 |
| Bal. c/f | 112,000 | Depreciation A/c | 56,000 |
|  | \#112,000 |  | \#112,000 |
|  |  | Year 3 |  |
|  |  | Bal. b/f | \# 112,000 |

## Statement of Financial Position Extracts

Cost Acc Depreciation NBV

| Year 1 | $\ldots$ | $N$ | $N$ |
| :--- | :---: | :---: | :---: |
| Machinery | 300,000 | 56,000 | 244,000 |

Year 2
$\begin{array}{llll}\text { Machinery } & 300,000 & 112,000 & 188,000\end{array}$

## Solution to Example 2

Since the depletion rate is already given, it is simple to calculate the annual depletion charges by using the rate to multiply the units extracted in each year. But in a situation where the depletion rate is not stated we use the following formula to determine it:

Depletion $=\left(\left(\frac{\text { Cost }- \text { Residual value }}{\text { Estimated total units of output }}\right) \mathrm{x}\right.$ units extracted in a period $)$
Where depletion rate is $\left(\frac{\text { Cost-Residual value }}{\text { Estimated total units of output }}\right)$

$$
\left(\frac{\mathrm{N} 200,000,000-\mathrm{NO}}{10,000,000}\right)
$$

$$
\frac{\mathrm{N} 200,000,000}{10,000,000}=\mathrm{N} 20 / \text { barrel }
$$

The depletion charges for the different years apply as follows:
Year $2013=\$ 20 \times 500,000=\$ 10,000,000$
Year $2014=\$ 20 \times 800,000=\$ 16,000,000$
Year $2015=\# 20 \times 1,200,000= \pm 24,000,000$

### 4.0 CONCLUSION

Depreciation methods are carried out using time-based methods or non-time based methods. However, the former was examined in the previous Unit while the latter was examined in this Unit. But this Unit considered comprehensive illustrations that cut across both broad methods.

### 5.0 SUMMARY

Non-time based methods were discussed with examples. Units of production, machine hours and revaluation were the non-time based methods examined in this Unit. Amortisation of intangible non-current assets and depletion of natural resources were also examined. The accounting entries of depreciation, which is equally applicable to amortisation and depletion, were examined as well as the illustration of how depreciation and the underlying non-current assets would appear in the statement of financial position.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Differentiate between depletion and amortisation
2. Explain what you understand by (i) tangible assets (ii) intangible assets (iii) wasting assets.
3. Freedom Group acquired a quarry with a capacity of 20 million tonnes of granite for $\pm 45 \mathrm{~m}$ in 2012 excluding incidental legal fee and other costs of $£ 5 \mathrm{~m}$. The firm's policy uses a depletion rate equitably on each tonne extracted.

Required:
Calculate the depletion charges for the following years:

| Year | Tonnes extracted |
| :--- | :--- |
| 2013 | 140,000 |
| 2014 | 350,000 |
| 2015 | 640,000 |

### 7.0 REFERENCES/FURTHER READING

Anthony, R. N., Hawkins, D. F., \& Merchant, K. A. (2007). Accounting: texts and cases, 12th edition, Boston: McGraw Hill Education.

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## UNIT 11

## ACCOUNTING FOR THE PURCHASE AND SALE OF NON-CURRENT ASSETS CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Purchase and Sale of Non-current Assets
3.2 The Purchase or Acquisition of Non-current Assets
3.3 The Sale or Disposal of Non-current Assets
3.4 Asset Exchanges for Another
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

The purchase and sale of non-current assets are not to be confused with sales and purchases relating to merchandising goods. Purchases mean the goods that an entity bought for the purpose of resale. When that entity sells those goods held for the purpose of resale, it means the entity has made sales. Such transactions form part of the ordinary trading (buying and selling) activities of the firm. Purchases give rise to inventories when the goods purchased are not fully sold in the period. But our focus in this Unit is not on this type of purchase for the purpose of resale but the acquisition of non-current assets for the purpose of running the business. Such non-current assets include motor vehicle, plant and equipment, land and building, etc. However, these non-current assets might equally be regarded as purchases and
ultimately inventories by firms that deal in buying and selling them. For example, an estate developer will regard buildings acquired for the purpose of resale as purchases and ultimately inventories when unsold in the particular accounting period. You should not be confused about this. What constitutes a non-current asset to a firm depends on what it does with that asset. If it trades on that asset, it will not form part of its non-current assets. For example, a transport company will treat its motor vehicles for conveying passengers as non-current assets, whereas a vehicle dealer will treat similar motor vehicles it sells as inventories. So what is considered as sales, purchases, inventories and non-current assets depends on the nature of the business.

### 2.0 OBJECTIVES

At the end of this Unit the student should be able to distinguish between non-current assets held as trading items and those held for the purpose of running the business. The student should be able to make the accounting entries (journals and ledgers) for the purchase and disposal of non-current assets. In addition, the student should be able to make the relevant accounting treatments where a non-current asset is exchanged for another non-current asset.

### 3.0 MAIN CONTENT

### 3.1 Purchase and Sale of Non-current Assets

Illustrations are done at each section in order to promote the student's comprehension at each stage of the discussions.

### 3.2 The Purchase or Acquisition of Non-current Assets

Non-current assets acquired by a business entity are treated as a capital expenditure. This is because the assets generate benefits to the entity in more than one accounting period. As we discussed in Units 9 and 10, those assets are expensed to the income statement through a process called depreciation. It is important for students to understand the accounting treatments of the costs of non-current assets. Since land and buildings, motor vehicles,
equipment, machineries are examples of non-current assets; the composition of the cost is usually more than the purchase price (see Unit 6). Moreover, the asset can be purchase on cash or non-cash basis while at other times it might involve the exchange of one asset for another.

## Example of the accounting treatment of the purchase of non-current assets

Olaoluwa Cottage Farm acquired a tractor on 1st January 2014 at the cost of A5 million and paid the vendor N 3 million cash on same day with the balance payable in two equal annual instalments on the anniversary of the purchase.

Required:
a. Journalise and prepare the necessary accounts.
b. Show how the Vendor account would look like from 2014 to 2016
c. Prepare an extract of the statement of financial position based on these data. Ignore depreciation.

Hint: This is not a hire purchase.

## Solution:

(a)

Olaoluwa Cottage Farm
Journal entries

| Date | Detail | $\begin{gathered} \hline \text { Debit } \\ \# \end{gathered}$ | Credit N |
| :---: | :---: | :---: | :---: |
| 1/1/2014 | Tractor A/c <br> Cash A/c <br> Vendor A/c <br> Being purchase of tractor partly in cash and on account due for payment in two equal annual instalments | 5,000,000 | $\begin{aligned} & 3,000,000 \\ & 2,000,000 \end{aligned}$ |


| Dr | Tractor A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Cash A/c | 3,000,000 |  |  |
| Vendor A/c | 2,000,000 | Bal. c/f | 5,000,000 |
|  | \$5,000,000 |  | \$5,000,000 |
| Bal. b/f | ※5,000,000 |  |  |


| Dr | Vendor A/c |  | Cr |
| :---: | :---: | :---: | :---: |
| Bal. c/f | $\begin{gathered} \mathrm{N} \\ \underline{2,000,000} \end{gathered}$ | Tractor A/c <br> Bal. b/f | $\begin{array}{r} \mathrm{N} \\ \underline{2,000,000} \\ \end{array}$ |
| Dr | Cash A/c |  | Cr |
|  | N | Tractor A/c | $\begin{gathered} \ddagger \\ 3,000,000 \end{gathered}$ |
| (b) |  |  |  |
| Dr | Tractor Vendor A/c |  | Cr |
|  | N | 1/1/2014 Tractor A/c | N |
| 31/12/2014 Bal. c/f | f $2 \underline{\underline{2,000,000}}$ |  | $\underline{\underline{2,000,000}}$ |
| Cash A/c | 1,000,000 |  |  |
| 31/12/2015 Bal. c/f | f 1,000,000 | 1/1/2015 Bal. b/f | 2,000,000 |
|  | N2,000,000 |  | \#2,000,000 |
| Cash A/c | N1,000,000 | 1/1/2016 Bal. b/f | \#1,000,000 |

## Olaoluwa Cottage Farm

Statement of Financial Position Extract as at 31 December 2014 N
Non-current assets:

Tractors

## Current liabilities

Tractor Vendor
1,000,000

## Long-term liabilities

## Olaoluwa Cottage Farm

Statement of Financial Position Extract as at 31 December 2015 N

## Non-current assets:

Tractors
5,000,000

## Current liabilities

Tractor Vendor 1,000,000

## Olaoluwa Cottage Farm

Statement of Financial Position Extract as at 31 December 2016
\#

## Non-current assets:

Tractors 5,000,000

You will notice from the above statements of financial position extracts that they are a bit different to the complete statement of financial position we learnt in our first semester where we have to draw single or double lines under our figures. We did not do so here because these are not complete statements of financial position but only extracts, that is, the portion thereof as much as the available information could permit. You will also realise that in year 2014 the tractor vendor came under current liabilities and long-term liabilities. Remember that the question told us that the $\ddagger 2$ million owed the venture would be paid in two annual instalments. Since the asset was purchased on 1 January 2014, the first instalment is due on 1 January 2015 and the second on 1 January 2016. Therefore, at the 2014 financial position date, the $\# 1$ million due for payment in 2015 will be treated as a current liability and the $\# 1$ million due in 2016 will be treated as a long-term liability (see Units 4 and 5). But in 2015 financial position date, the $\$ 1$ million due in 2016 becomes a current liability whereas the $\# 1$ million due in 2015 is paid during the year which no longer forms part of the current liability. As the $¥ 1$ million due in 2016 is paid in that year, the Tractor Vendor will neither appear in
the 2016 financial position as a current liability nor long-term liability because the debt has been fully paid.

### 3.3 The Sale or Disposal of Non-current Assets

The disposal of non-current asset is not part of the merchandising activities of an entity and so the revenue realised would not be treated as sales revenue but would be used to determine whether a loss or gain has been made on the sale of the underlying asset. The accounting treatment for the disposal of non-current asset would also take into account the accumulated depreciation of the asset prior to disposal for the purpose of ascertaining gain or loss on disposal. An example would illustrate this more vividly.

## Example of disposal of non-current asset

Adamu Baike Dairy uses sophisticated machines to produce evaporated milk. In June 2015, it sold one of its dairy machines that cost $¥ 150,000$ for $¥ 30,000$ cash. The accumulated depreciation on the machine is $¥ 110,000$.

Required:
a. Determine the gain or loss. What would be the gain or loss if the accumulated depreciation were $¥ 132,000$ ?
b. Journalise the entries to record this transaction
c. Prepare the relevant accounts

## Solution

## (a) i

AdamuBaike Dairy

|  | $\ddagger$ |
| :--- | :---: |
| Machine cost | 150,000 |

Less: Accumulated depreciation
Net book value $\quad 40,000$
Disposal price
30,000

A loss of $\$ 10,000$ occurred on the sale of the machine and this would be expensed to the income statement for this period.
(a) ii

## Adamu Baike Dairy

|  |  |
| :--- | :---: |
| Machine cost | 150,000 |
| Less: Accumulated depreciation | $\underline{(132,000)}$ |
| Net book value | 18,000 |
| Disposal price | $\underline{30,000}$ |
| Gain/(loss) on disposal | $\underline{\underline{12,000}}$ |

A gain of $¥ 12,000$ has resulted from the sale of the machine and this would be credited to the income statement as a non-trading income for the period.
(b)

Adamu Baike Dairy
Journal entries

| Date/item | Detail | Debit N | $\begin{gathered} \text { Credit } \\ \neq \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| (a)i | Cash A/c <br> Allowance for depreciation A/c <br> Loss on disposal of diary machine $\mathrm{A} / \mathrm{c}$ <br> Dairy machine A/c <br> Being the recording entries of diary machine sold at a loss | $\begin{aligned} & \hline 30,000 \\ & 110,000 \\ & 10,000 \end{aligned}$ | 150,000 |
| (a)ii | Cash A/c <br> Allowance for depreciation A/c <br> Gain on disposal of diary machine $\mathrm{A} / \mathrm{c}$ <br> Dairy machine A/c <br> To record sale of diary machine at a price greater than book value | $\begin{aligned} & \hline 30,000 \\ & 132,000 \end{aligned}$ | $\begin{aligned} & 12,000 \\ & 150,000 \end{aligned}$ |

(b) [Disposal at a loss]

Adamu Baike Dairy

(c) [Disposal at a gain]

Adamu Baike Dairy


As you would observe from the example, the disposal account functions more or less like the income statement (profit or loss) to ascertain whether profit or loss is made on the disposal. The gain or loss is recognised in the income statement for the period.

### 3.4 Asset Exchanges for Another Asset

Apart from entities acquiring non-current assets outright for cash or credit, they could also use one of their non-current assets to offset the price of the new one they want to buy. That process is regarded as trading in. The accounting treatment depends on whether the asset that exchanges for another is similar or dissimilar. Let us adapt our example of the dairy machine of Adamu Baike Dairy in our preceding section.

## Example

Adamu Baike Dairy uses sophisticated machines to produce evaporated milk. In June 2015, it bought a new dairy machine quoted at a cash price of $£ 200,000$ paying $£ 185,000$ in cash plus a trade in of one of its dairy machines that originally cost $\$ 150,000$. The accumulated depreciation on the old machine is $\mathrm{N} 110,000$.

Required:
a. Determine the gain or loss.
b. Journalise the entries to record this transaction
c. Prepare the relevant accounts

| (a) Adamu Baike Dairy <br> Determination of gain or loss |  |  |
| :--- | :---: | :---: |
|  | 150,000 |  |
| Old Dairy Machine at cost | $\underline{(110,000)}$ |  |
| Less: Accumulated depreciation | 40,000 |  |
| Net book value | $\underline{15,000}$ |  |
| Trade-in value of old machine* | $\underline{(25,000)}$ |  |
| Gain/(loss) on disposal |  |  |

[^1](b) [Exchanges at a loss]

AdamuBaike Dairy
Journal entries

| Date/item | Detail | $\begin{gathered} \text { Debit } \\ \# \end{gathered}$ | Credit \# |
| :---: | :---: | :---: | :---: |
| $\begin{array}{\|l} \text { June } \\ 2015 \end{array}$ | New dairy machine A/c <br> Allowance for depreciation A/c <br> Loss on exchange of old diary machine $\mathrm{A} / \mathrm{c}$ <br> Old dairy machine $\mathrm{A} / \mathrm{c}$ <br> Cash A/c <br> To record exchange of similar assets and the associated loss on exchange | $\begin{aligned} & \hline 200,000 \\ & 110,000 \\ & 25,000 \end{aligned}$ | $\begin{aligned} & 150,000 \\ & 185,000 \end{aligned}$ |

Assuming the facts relating to the old dairy machine remain the same and the entity traded in the old asset and paid $\# 150,000$ instead of the $\# 185,000$ in full settlement of the new purchase, how would you calculate and record these transactions in the books of the entity?

| AdamuBaike Dairy |  |
| :--- | :---: |
| Determination of gain |  |
| $N$ |  |$)$

[^2]AdamuBaike Dairy
Journal entries [Gain arising from exchange of similar assets]

| Date/item | Detail | Debit <br> $\AA$ | Credit <br> $\AA$ |
| :--- | :--- | :---: | :---: |
| June | New dairy machine A/c | Allowance for depreciation A/c | 190,000 |
| 2015 | Old dairy machine A/c <br> Cash A/c <br> To record exchange of similar assets | 110,000 |  |
|  |  |  | 150,000 |
|  |  |  | 150,000 |

However, when the assets are dissimilar, for example, dairy machine and a tractor, the gain would be recognised separately in the period while the new asset would be recognised at the quoted purchase price. The resultant journal entries would be as follows:

Adamu Baike Dairy
Journal entries [Gain arising from exchange of dissimilar assets]

| Date/item | Detail | $\begin{gathered} \text { Debit } \\ \mathrm{N} \end{gathered}$ | $\begin{gathered} \text { Credit } \\ \AA \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { June } \\ & 2015 \end{aligned}$ | New dairy machine A/c <br> Allowance for depreciation A/c <br> Gain on exchange A/c <br> Old dairy machine $\mathrm{A} / \mathrm{c}$ <br> Cash A/c <br> To record exchange of dissimilar assets and the associated gain on exchange | $\begin{aligned} & \hline 200,000 \\ & 110,000 \end{aligned}$ | $\begin{aligned} & 10,000 \\ & 150,000 \\ & 150,000 \end{aligned}$ |

### 4.0 CONCLUSION

Business entities usually purchase non-current assets outright by cash, through credit or a mix of both. At other times, they trade in or exchange the already existing non-current asset for another one. The Unit has elaborately considered the above scenarios with illustrations.

### 5.0 SUMMARY

Non-current assets are capital expenditure items of business entities. We have made it clear that non-current assets are not usually defined by their longevity or durability but the purpose into which they are put in the business. By implication, a non-current asset that could be regarded as a trading item (purchases or inventory) to one entity could be regarded as a non-
current asset to another entity. Non-current assets are recognised in the statement of financial position until the cost of the asset has been allocated over its estimated useful life. When one asset exchanges for another (whether they are similar or not) the loss arising from the disposal is charged to profit or loss. When a gain arises on the exchange of assets of a similar nature, the gain is used to reduce the cost of the new asset, but when the assets are dissimilar, the gain is recognised in the period in profit or loss while the new asset is recognised at its quoted purchase cost.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What is the difference between the purchase of non-current asset and purchases?
2. Why is the revenue accruing from disposal of non-current asset not recognised as part of an entity's sale?
3. How would you treat the gain arising from the exchange of one non-current asset for another asset which is: (i) Similar? (ii) Dissimilar?

### 7.0 REFERENCES/FURTHER READING

Anthony, R. N., Hawkins, D. F., \& Merchant, K. A. (2007). Accounting: texts and cases, 12th edition, Boston: McGraw Hill Education.

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## UNIT 12

## INVENTORY VALUATION I: PERIODIC INVENTORY MODEL

## CONTENTS

### 1.0 Introduction

2.0 Objectives
3.0 Main Content
3.1 Inventory and Simple Inventory Valuation
3.2 Meaning and Nature of Inventory
3.3 Methods of Inventory Valuation
3.4 Inventory and Its Effects on Profit and Financial Position
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Merchandising organisations have goods they sell in order to generate revenue and ultimately profit. It is naturally inappropriate for these entities to wait for customers to demand their products before the order for inventory, otherwise, the attendant delays will lead to potential loss of customers arising from customers' dissatisfaction. In order to avoid this negative eventuality, entities usually hold inventory as a buffer prior to when customers demand for them. However, the need to place a value on the unsold inventories at the end of the year and the cost of those sold in order to know the portion of the relevant cost to charge against
revenue and the one to carry forward as an asset in the financial position is usually not that simple. This Unit therefore examines the nature of inventory, the methods of valuing inventory and the effects of inventory values on profit and asset.

### 2.0 OBJECTIVES

After studying this Unit, the student should be able to define what inventory is and identify when assets can be regarded as inventories. The student should be able to explain the nature of periodic inventory model or system. It is also expected that the student should be able to identify and compute the common methods of valuing inventory as well as be able to describe the effects of inventory on the profit or loss and financial position.

### 3.0 MAIN CONTENT

### 3.1 Inventory and Simple Inventory Valuation

### 3.2 Meaning and Nature of Inventory

Inventories are generally referred to as the unsold portion of goods held for resale. What constitutes inventories depends on the nature of the business of an entity. Purchases give rise to inventories when the goods purchased are not fully sold in the period. However, noncurrent assets such as motor vehicle, plant and equipment, land and building, for example, might equally be regarded as purchases and ultimately inventories by firms that deal on buying and selling them. For example, estate developer will regard buildings acquired for the purpose of resale as purchases and ultimately inventories if not sold in the particular accounting period. Students should not be confused about this. What constitutes a non-current asset to a firm depends on what it does with that asset. This is also true of purchases as what constitutes purchases is a function of the nature of the business of an entity or simply what the entity does with the particular assets. There are three basic types of inventories namely, raw materials, work-in-progress (or semi-finished goods) and finished goods. Whereas a manufacturing firm will obviously have these three types of inventories, a merchandising
firm (i.e., a firm that buys and sells) which does not engage in manufacturing will only have finished goods inventories.

A major concern to entities in respect of inventory involves the value to be placed on the inventory at the end of the accounting year or at such time when a physical count of inventory is taken, which will also have implications for the amount to be allocated to cost of sales in that period. For the purpose of inventory valuation, a periodic or perpetual/continuous inventory valuation could be applied. We shall discuss periodic inventory in this Unit and defer perpetual inventory model to Unit 13. A periodic inventory valuation occurs where an entity takes inventory count and determines the value at the end of the accounting year as a basis for preparing it financial statement. The entity using periodic inventory model will be unable to determine the value of its closing inventory and cost of sales until stock-taking is done at the end of the financial year or at such time when inventory count is undertaken.

### 3.3 Methods of Inventory Valuation

Generally, inventories are valued at lower of cost and net realisable or fair value. However, the value/cost is only ascertained after applying a particular method of valuation. It is worth mentioning here that different valuation methods yield different values of inventory and ultimately cost of sales. An entity's accounting policy (see Unit 15) determines the method the entity would adopt for valuing its inventory. The common methods of valuing inventory are: First In First Out (FIFO), Last In First Out (LIFO), Average (simple and weighted) and Standard Cost. We shall now discuss them in turn.

### 3.3.1 First In First Out (FIFO)

The underlying assumption of this method of valuing inventory is that earlier purchases of goods for resale are considered sold prior to subsequent purchases. This means that if an entity has three batches of purchases in a period: $\mathrm{A}=300$ units (at $\# 10$ each), $\mathrm{B}=500$ (at
\#11) and $\mathrm{C}=600$ (at $\# 15$ ), what would be the value of closing inventory and cost of sales if 1,000 units were sold in the period.

Units of closing inventory $=$ Total units purchased less units sold
Inventory $=1,400-1,000=400$.
The order of sales following the FIFO assumption would be: Batch A, followed by Batch B and then Batch C. So the closing inventory of 400 units would come from Batch C. The value of the closing stock would then be $£ 6,000$ (i.e., 400 units $\mathrm{x} \equiv 15$ ). By implication, cost of sales would be determined as follows:

$$
\begin{aligned}
& (300 \times \AA 10)+(500 \times \AA 11)+(200 \times \# 15) \\
& \# 3,000+\# 5,500+\# 3,000=\# 11,500 .
\end{aligned}
$$

### 3.3.2 Last In First Out (LIFO)

The assumption is that the last batches of goods are considered to be sold first prior to earlier purchases. This means that later batches are assumed to be sold before earlier ones. Using our FIFO data above, LIFO will produce the following values of closing inventory and cost of sales:

$$
\begin{aligned}
\text { Closing inventory }=( & 300 \times \AA 10)+(100 \times \AA 11) \\
& \ddagger 3,000+\nexists 1,100=£ 4,100
\end{aligned}
$$

$$
\text { Cost of sales }=(600 \times ¥ 15)+(400 \times ¥ 11)
$$

$$
\pm 9,000+\mathbb{N} 4,400=\mathbf{\#} 13,400
$$

### 3.3.3 Simple Average Method (SAM)

This applies a simple average of the unit costs/prices to the goods sold to determine the cost of goods sold and average of the unit costs to the units of closing inventory to get the value of closing inventory. If we use our example above, the values of closing inventory and cost of sales would be as follows:

First, we compute the average price, which is the aggregate of the prices of the three batches divided by 3 .

$$
\begin{aligned}
& \text { Average price }=\frac{\# 10+\# 11+\# 15}{3} \\
& \qquad \frac{\# 36}{3}=\# 12 \\
& \text { Closing inventory }=400 \times \# 12=\# 4,800 \\
& \text { Cost of sales }=1,000 \times \neq 12=\# 12,000
\end{aligned}
$$

Because the average computation ignores the units purchased that would eventually absorb the average price as inventory and cost of sales, the total of the computed cost of sales and inventory is not equal to the total cost of purchasing the three batches. We learnt from FIFO and LIFO examples above that the total cost of purchases (inventory and cost of sales) is \#17,500 but the simple average produced a different result because of the averaging of the prices independent of the corresponding units purchased.

### 3.3.4 Weighted Average Method (WAM)

Unlike the simple average method that ignores the units of goods purchased in determining the average cost, this method uses the weighting of the unit prices of all the batches purchased before dividing by the total units purchased. The average cost then becomes the unit cost for computing both the values of cost of sales and closing inventory. Using our example above, the value of inventory and cost of sales would be as follows:

$$
\begin{aligned}
\text { Weighted average } & =\frac{(300 x \# 10)+(500 x \# 11)+(600 x \# 15)}{300+500+600} \\
& =\frac{\# 3,000+\# 5,500+\# 9,000}{1,400} \\
& =\frac{\# 17,500}{1,400}=\# 12.50
\end{aligned}
$$

Therefore, the value of closing inventory and cost of sales are:
Closing inventory $=400$ units $\mathrm{x} \equiv 12.50=\mathrm{N} 5,000$

### 3.3.5 Standard Cost

This method uses a predetermined rate set by the entity's management for the purpose of calculating the cost of sales and inventory. While this method is easy and convenient to apply, it does not utilise actual cost used in purchasing the batches of goods. However, the entity does not set the standard cost per unit arbitrarily but probably based on experience and other prevailing circumstances. Following our previous example, if we assume that the management sets a standard cost of $\# 13.50$ /unit, the closing inventory and cost of sales would respectively be: $\AA 5,400$ ( 400 units $\mathrm{x} \AA 13.50$ ) and $\AA 13,500$ (1,000 units $\mathrm{x} \# 13.50$ ).

### 3.4 Inventory and Its Effect on Profit and Financial Position

The value of inventory will equally affect the reported profit and the value of current asset. The higher the value placed on the closing inventory, the higher the profit of the period would be. Remember that closing inventory is deducted from the cost of goods available for sale to get the cost of sales, which is invariably similar to adding it to sales. Closing inventory also affects the value of current assets: the higher the closing inventory the higher the value of current assets.

Nevertheless, after valuing inventory using any of the inventory valuation methods and the entity compares that value with a potential market value the inventory would sell for, the lower of the cost-based value and net realisable value would be used as the value of closing inventory for the purpose of computing profit in the statement of comprehensive income and current asset in the statement of financial position. After making this comparison, the estimated loss in value is charged as an expense to the profit or loss for the year.

### 3.5 Illustrative Examples

## Example 1

From the information below relating to five business entities, determine the (i) basis of valuing the inventory (cost or net realisable value) at the end of the year (ii) value of closing inventory that would appear in their financial statements, and (iii) amount to be written off to profit or loss as inventory loss and how this will be treated in the ledger account.

| Entities | Inventory at <br> Cost <br> $\mathbf{n}$ | Inventory at <br> NRV <br> $\mathbf{N}$ |
| :---: | :---: | :---: |
| Chip-Chip Enterprises | 561,000 | 673,400 |
| Omede Shop | 675,000 | 526,700 |
| Akin Carpet | 988,000 | $1,060,000$ |
| Adamu Merchandising | 350,000 | 344,100 |
| Bisi Toiletries | 674,300 | 550,000 |

## Example 2

Adesuwa Toy Shop orders and sells toys at Ikoyi High Street in Lagos. On 1st January, the Shop had 800 units of toys which were purchased at $\$ 100$ each. During the year, Adesuwa Toy Shop made four batches of purchases of toys as follows:

| Batches | Units | Unit price <br> $\mathbf{N}$ | Total cost <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: |
| February | 1,000 | 105 | 105,000 |
| May | 1,200 | 110 | 132,000 |
| September | 1,300 | 120 | 156,000 |
| November | 1,600 | 122 | 195,200 |

The Shop sold 4,700 units during the year.
Required:
(a) Compute the quantity of closing inventory
(b) Compute the cost of sales and closing inventory using the following methods: (i) FIFO (ii) LIFO (iii) SAM, and (iv) WAM
(c) Determine the value of closing inventory if the net realisable value of inventory held at the end of the year is: (i) $£ 95$ (ii) $¥ 112$

## SOLUTION

## Solution to Example 1

The important thing the student should note here is that inventory is recognised in the financial statements at lower of cost and net realisable value. If the cost is less than the NRV, the value to be recognised in the financial statements will be cost; if NRV is less than the cost, then the NRV will be the recognisable value of inventory in the financial statements. However, when the cost is greater than the NRV (i.e., NRV less than cost), a potential loss occurs and that loss has to be charged to the profit or loss for the year.

| Entities | Inventory <br> at Cost <br> $\mathbf{N}$ <br> $\mathbf{( A )}$ | Inventory <br> at NRV <br> $\mathbf{N}$ | Basis of <br> valuation | Closing <br> inventory <br> $\mathbf{N}$ <br> $\mathbf{( B )}$ | Inventory <br> loss <br> $\mathbf{N}$ <br> $(\mathbf{A}-\mathbf{B})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chip-Chip Enterprises | 561,000 | 673,400 | Cost | 561,000 | Nil |
| Omede Shop | 675,000 | 526,700 | NRV | 526,700 | 148,300 |
| Akin Carpet | 988,000 | $1,060,000$ | Cost | 988,000 | Nil |
| Adamu Merchandising | 350,000 | 344,100 | NRV | 344,100 | 5,900 |
| Bisi Toiletries | 674,300 | 550,000 | NRV | 550,000 | 124,300 |

The treatment of the losses in the ledger accounts are as follows:
Generally, the accounting entries for the inventory loss in value are: Dr Profit or loss A/c and Cr Inventory A/c.

## Omede Shop

| Dr | Inventory A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Profit or Loss A/c | 148,300 |
| Bal. b/f | 675,000 | Bal. c/f | 526,700 |
|  | \#675,000 |  | N675,000 |
| Bal. b/f | \#526,700 |  |  |

## Adamu Merchandising

| Dr | Inventory A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Profit or Loss A/c | 5,900 |
| Bal. b/f | 350,000 | Bal. c/f | 344,100 |
|  | \# 350,000 |  | ※350,000 |
| Bal.b/f | \#344,100 |  |  |

## Bisi Toiletries

| Dr | Inventory $\mathrm{A} / \mathrm{c}$ |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Profit or Loss A/c | 124,300 |
| Bal. b/f | 674,300 | Bal. c/f | 550,000 |
|  | N674,300 |  | $\pm$ \#74,300 |
| Bal. b/f | \#550,000 |  |  |

## Solution to Example 2

(a)

## Computation of quantity of closing inventory

## Batches

Opening 800
February $\quad 1,000$
May $\quad 1,200$
September $\quad 1,300$
December
1,600

Goods available for sale $\quad 5,900$
Less: Goods sold $\quad(4,700)$
Units of closing inventory $\underline{\underline{1,200}}$
(b) i

## FIFO

Computation of Cost of sales

| Batches | Units <br> Purchased | Units sold <br> from batch | Unit price <br> $\mathbf{N}$ | Cost of sales <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: |
| Opening | 800 | 800 | 100 | 80,000 |
| February | 1,000 | 1,000 | 105 | 105,000 |
| May | 1,200 | 1,200 | 110 | 132,000 |
| September | 1,300 | 1,300 | 120 | 156,000 |
| November | 1,600 | 400 | 122 | 48,800 |
| TOTAL |  | $\mathbf{4 , 7 0 0}$ |  | $\mathbf{N 5 2 1 , 8 0 0}$ |

Computation of Cost of Closing Inventory (FIFO)
Since the first batches are deemed to be sold first, it means that the closing inventory of 1,200 units will come from the November batch.

Value of closing inventory $=1,200 \times \mathrm{N} 122=\mathbf{\# 1 4 6 , 4 0 0}$
*NB: If you were to compute the cost of goods available for sale, that would simply be the value of the closing inventory plus the cost of sales and this will give us $¥ 668,200$.
(b)ii

## LIFO

Computation of Cost of sales

| Batches | Units <br> Purchased | Units sold <br> from batch | Unit price <br> $\mathbf{N}$ | Cost of sales <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: |
| Opening | 800 | 0 | 100 | 0 |
| February | 1,000 | 600 | 105 | 63,000 |
| May | 1,200 | 1,200 | 110 | 132,000 |
| September | 1,300 | 1,300 | 120 | 156,000 |
| November | 1,600 | 1,600 | 122 | 195,200 |
| TOTAL |  | $\mathbf{4 , 7 0 0}$ |  | $\mathbf{N 5 4 6 , 2 0 0}$ |

Computation of Cost of Closing Inventory (LIFO)
Since the first batches are deemed to be sold last, it means that the closing inventory of 1,200 units will come from the opening and February batches.
$\begin{aligned} \text { Value of closing inventory }= & \text { Opening batch } & 800 \text { units } \times ¥ 100= \pm 80,000 \\ & \text { February batch } & 400 \text { units x } ¥ 105= \pm \pm 42,000 \\ & \text { Closing inventory cost } & \pm \underline{\underline{\mathbf{1 2 2}, 000}}\end{aligned}$

## Simple Average Method (SAM)

Computation of Cost of sales and Closing Inventory

| Batches | Unit price <br> $\mathbf{N}$ |
| :---: | :---: |
| Opening | 100 |
| February | 105 |
| May | 110 |
| September | 120 |
| November | 122 |
| TOTAL | $\mathbf{5 5 7}$ |

Average Cost $=\frac{\text { Total unit price }}{\text { Number of batches }}$, where the number of batches is 5 (i.e, Opening, February, May, September, November)

$$
=\frac{\# 557}{5}=\# 111.40
$$

Cost of sales $=4,700$ units $x \neq 111.40=\mathbf{~} \mathbf{5 2 3}, 580$
Value of closing inventory $=1,200 x \mathrm{~N} 111.40=\$ 133,680$
(b) iv

## (Periodic) Weighted Average Method (WAM)

Computation of Cost of sales and Closing Inventory

| Batches | Units <br> purchased | Unit price <br> $\mathbf{N}$ | Weighted <br> cost <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: |
| Opening | 800 | 100 | 80,000 |
| February | 1,000 | 105 | 105,000 |
| May | 1,200 | 110 | 132,000 |
| September | 1,300 | 120 | 156,000 |
| November | 1,600 | 122 | 195,200 |
| TOTAL | $\mathbf{5 , 9 0 0}$ |  | $\mathbf{N 6 6 8 , 2 0 0}$ |

Weighted Average Cost $=\frac{\text { Weighted Cost }}{\text { Total Units Purchased or Available for Sale }}$

$$
=\frac{\# 668,200}{5,900}=\# 113.25 \text { (approximated/rounded to } 2 \text { decimal places) }
$$

Cost of sales $=4,700$ units $x \neq 113.25=\$ 532,275$
Value of closing inventory $=1,200 \times \mathrm{N} 113.25=\mathrm{\#} 135,900$
(c)

Determination of value of closing inventory @ $\ddagger 95$ NRV

| Method of <br> Valuation | Units of <br> Inventory | Cost | NRV @ <br> $\mathbf{N 9 5 / u n i t}$ | Inventory <br> Value <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: |
| FIFO | 1,200 | 146,400 | 114,000 | 114,000 |
| LIFO | 1,200 | 122,000 | 114,000 | 114,000 |
| SAM | 1,200 | 133,680 | 114,000 | 114,000 |
| WAW | 1,200 | 135,900 | 114,000 | 114,000 |

Determination of value of closing inventory @ $\# 112$ NRV

| Method of <br> Valuation | Units of <br> Inventory | Cost | NRV @ <br> $\mathbf{N 1 1 2 / u n i t}$ | Inventory <br> Value <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: |
| FIFO | 1,200 | 146,400 | 134,400 | 134,400 |
| LIFO | 1,200 | 122,000 | 134,400 | 122,000 |
| SAM | 1,200 | 133,680 | 134,400 | 133,680 |
| WAW | 1,200 | 135,900 | 134,400 | 134,400 |

### 4.0 CONCLUSION

We have examined inventory and its valuation and how it affects the cost of sales and reported profit.

### 5.0 SUMMARY

In this Unit, we studied the nature of inventory and the different inventory valuation methods such as FIFO, LIFO, SAM, WAM, and Standard Cost. Moreover, this Unit equally looked at how inventory valuation methods affect the cost of sales and profit as well as the carrying value of closing inventory in the statement of financial position.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you understand by periodic inventory system.
2. What is the rationale for applying the notion of lower of cost or net realisable value?

What accounting concept do you think underpins this rule?
3. The following data for the month of January relate to the records of Mimido Enterprises which deals on 'I love mummy' branded baby nappies. On 1st January, the shop had 800 units of nappies which were purchased at $\$ 10$ each:

| Dates | Units <br> Purchased | Units <br> Sold | Purchase <br> price/unit <br> $\mathbf{n}$ | Sales <br> price/unit <br> $\mathbf{n}$ |
| :---: | :---: | :---: | :---: | :---: |
| Jan. 3 | 1,000 |  | 10.50 |  |
| Jan. 5 |  | 1,200 |  | 25 |
| Jan. 10 | 500 |  | 11 |  |
| Jan. 12 | 800 |  | 12 |  |
| Jan. 15 |  | 1,600 |  | 29 |
| Jan. 20 | 1,000 |  | 12.75 |  |
| Jan. 25 |  | 600 |  | 30 |
| Jan. 29 | 400 |  | 12.45 |  |

Required:
a. Compute the cost of sales and closing inventory following the periodic inventory model assumption: (i) FIFO (ii) LIFO (iii) SAM, and (iv) WAM

If the firm's pre-determined unit price of valuing inventory is $\$ 12.65$, compute the cost of sales and closing inventory for the month.
4. The following costs and net realisable values were drawn from the books of Apo Paints Merchants which deals on five product lines of paints:

| Product Line | Inventory at <br> Cost <br> $\mathbf{N}$ | Inventory at <br> NRV <br> $\mathbf{N}$ |
| :---: | :---: | :---: |
| Chiplex | 800,000 | 873,400 |
| Delux | 675,000 | 582,700 |
| Dumaplux | 988,000 | 982,000 |
| Sweetex | 380,000 | 404,100 |
| Lunaplex | 645,300 | 650,000 |

## Required:

(i) Identify the basis of valuing the inventory of each product line for the period (Hints: state whether it is cost or net realisable value)
(ii) Determine the value of closing inventory of each of the product lines as it would appear in the financial statements and the total inventory value that would appear in the financial statements.
(iii) Determine the amount to be written off to profit or loss account as inventory loss and how this will be treated in the ledger account.

### 7.0 REFERENCES/FURTHER READING

Hindmarch, A. and Simpson, M. (1991). Financial Accounting: an introduction, London: Macmillan

Hodge, R. (2008). Accounting: a foundation, London: Cengage Learning
Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 13

## INVENTORY VALUATION II: PERPETUAL INVENTORY MODEL

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Perpetual Inventory Model
3.2 The Nature of Perpetual Inventory Model
3.3 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Businesses normally want to keep track of their inventory transactions in order to be able to determine the level and value of inventory at any given point in time. This suggests that the entities do not have to wait until physical inventory count is done before they can determine the value of inventory and the cost of sales as is the case under periodic inventory system. Having examined simple and periodic inventory model in Unit 12, we shall now examine perpetual or continuous inventory model in this Unit so that the student will appreciate these nuances of inventory models and their implications for the various valuation methods.

### 2.0 OBJECTIVES

It is expected that at the end of studying this Unit, the student should be able to compare and contrast periodic and perpetual inventory models. In addition, the student should be able to
value closing inventory and cost of sales using FIFO, LIFO and moving averages (SAM and WAM) following the perpetual inventory model.

### 3.0 MAIN CONTENT

### 3.1 Perpetual Inventory Model

### 3.2 Nature of Perpetual Inventory Model

Perpetual inventory approach maintains inventory records on a continuous basis whenever there is movement in the level of inventory whether through purchases or sales. Whereas the entity using periodic inventory model will be unable to determine the value of its closing inventory until stock-taking is done at the end of the financial year, the entity using the perpetual model can readily ascertain the value of closing inventory at any point in time as the inventory records are updated immediately after making purchases or sales. Perpetual inventory model is easy in a computerised accounting system. The implication of using this system is that the entity is able to track the value of inventory and invariably cost of sales whenever transactions of sales or purchases are made. This does not mean that the entity does not carry out occasional or end of year physical inventory count. The physical count at the end of the period or year is to verify the correspondence of the number of inventory based on physical count and paper record.

The striking difference between the perpetual inventory system and periodic inventory system is the manner or frequency in which inventory transactions are updated to reflect the value of inventory and cost of sales. Whichever inventory system is adopted by an entity, it basically uses any of the inventory valuation methods already discussed in Unit 12 namely, FIFO, LIFO, SAM and WAM.

### 3.3 Illustrative Example

Adesuwa Toy Shop orders and sells toys at Ikoyi High Street in Lagos and maintains a perpetual inventory system. On 1st January, the shop had 800 units of toys which were
purchased at $¥ 100$ each. During the year, Adesuwa Toy Shop made four batches of purchases of toys as follows:

| Batches | Units | Unit price <br> $\mathbf{N}$ | Total cost <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: |
| February | 1,000 | 105 | 105,000 |
| May | 1,200 | 110 | 132,000 |
| September | 1,300 | 120 | 156,000 |
| November | 1,600 | 122 | 195,200 |

The Shop sold 4,700 units during the year as follows: March $(1,100)$, June $(1,200)$, October $(1,000)$, and December $(1,400)$.

Required:
Compute the cost of sales and closing inventory using the following methods: (i) FIFO (ii)
LIFO (iii) SAM, and (iv) WAM

## SOLUTION

## FIFO

Computation of Closing Inventory in a Perpetual Inventory System

| Dates | Purchased |  |  | Issued |  |  | Balance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Price N | Value N | Units | Price N | Value N | Units | Price N | Value N |
| Jan | 800 | 100 | 80,000 |  |  |  | 800 | 100 | 80,000 |
| Feb | 1,000 | 105 | 105,000 |  |  |  | $\begin{gathered} 800 \\ 1,000 \\ \hline \end{gathered}$ | $\begin{aligned} & 100 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 80,000 \\ 105,000 \\ \hline \end{gathered}$ |
| Mar |  |  |  | $\begin{aligned} & 800 \\ & 300 \end{aligned}$ | $\begin{aligned} & 100 \\ & 105 \end{aligned}$ | $\begin{aligned} & \hline 80,000 \\ & 31,500 \end{aligned}$ | 700 | 105 | 73,500 |
| May | 1,200 | 110 | 132,000 |  |  |  | $\begin{gathered} \hline 700 \\ 1,200 \end{gathered}$ | $\begin{aligned} & 105 \\ & 110 \end{aligned}$ | $\begin{gathered} \hline 73,500 \\ 132,000 \end{gathered}$ |
| June |  |  |  | $\begin{array}{r} 700 \\ 500 \\ \hline \end{array}$ | $\begin{aligned} & 105 \\ & 110 \end{aligned}$ | $\begin{array}{\|c\|} \hline 73,500 \\ 55,000 \\ \hline \end{array}$ | 700 | 110 | 77,000 |
| Sep | 1,300 | 120 | 156,000 |  |  |  | $\begin{aligned} & 700 \\ & 1,300 \end{aligned}$ | $\begin{aligned} & \hline 110 \\ & 120 \end{aligned}$ | $\begin{gathered} \hline 77,000 \\ 156,000 \end{gathered}$ |
| Oct |  |  |  | $\begin{aligned} & 700 \\ & 300 \end{aligned}$ | $\begin{aligned} & 110 \\ & 120 \end{aligned}$ | $\begin{aligned} & \hline 77,000 \\ & 36,000 \\ & \hline \end{aligned}$ | 1,000 | 120 | 120,000 |
| Nov | 1,600 | 122 | 195,200 |  |  |  | $\begin{aligned} & \hline 1,000 \\ & 1,600 \end{aligned}$ | $\begin{aligned} & \hline 120 \\ & 122 \end{aligned}$ | $\begin{aligned} & \hline 120,000 \\ & 195,200 \end{aligned}$ |
| Dec |  |  |  | $\begin{aligned} & 1,000 \\ & 400 \end{aligned}$ | $\begin{aligned} & 120 \\ & 122 \end{aligned}$ | $\begin{gathered} \hline 120,000 \\ 48,800 \end{gathered}$ | 1,200 | 122 | 146,400 |
| Cost of Sales |  |  |  |  |  | \#521,800 |  |  |  |
| Value of Closing Inventory |  |  |  |  |  |  |  |  | N146,400 |

## LIFO

Computation of Closing Inventory in a Perpetual Inventory System

| Dates | Purchased |  |  | Issued |  |  | Balance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Price N | Value N | Units | $\underset{N}{\text { Price }}$ | Value N | Units | Price N | Value N |
| Jan | 800 | 100 | 80,000 |  |  |  | 800 | 100 | 80,000 |
| Feb | 1,000 | 105 | 105,000 |  |  |  | $\begin{gathered} 800 \\ 1,000 \\ \hline \end{gathered}$ | $\begin{aligned} & 100 \\ & 105 \end{aligned}$ | $\begin{gathered} 80,000 \\ 105,000 \\ \hline \end{gathered}$ |
| Mar |  |  |  | $\begin{aligned} & 1,000 \\ & 100 \end{aligned}$ | $\begin{array}{\|l\|} \hline 105 \\ 100 \\ \hline \end{array}$ | $\begin{aligned} & \hline 105,000 \\ & 10,000 \end{aligned}$ | 700 | 100 | 70,000 |
| May | 1,200 | 110 | 132,000 |  |  |  | $\begin{gathered} \hline 700 \\ 1,200 \end{gathered}$ | $\begin{aligned} & 100 \\ & 110 \end{aligned}$ | $\begin{gathered} \hline 70,000 \\ 132,000 \\ \hline \end{gathered}$ |
| June |  |  |  | 1,200 | 110 | 132,000 | 700 | 100 | 70,000 |
| Sep | 1,300 | 120 | 156,000 |  |  |  | $\begin{aligned} & 700 \\ & 1,300 \end{aligned}$ | $\begin{aligned} & 100 \\ & 120 \end{aligned}$ | $\begin{gathered} \hline 70,000 \\ 156,000 \\ \hline \end{gathered}$ |
| Oct |  |  |  | 1,000 | 120 | 120,000 | $\begin{aligned} & 700 \\ & 300 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100 \\ & 120 \\ & \hline \end{aligned}$ | $\begin{array}{r} 70,000 \\ 36,000 \\ \hline \end{array}$ |
| Nov | 1,600 | 122 | 195,200 |  |  |  | $\begin{aligned} & 700 \\ & 300 \\ & 1,600 \end{aligned}$ | $\begin{aligned} & 100 \\ & 120 \\ & 122 \end{aligned}$ | $\begin{gathered} 70,000 \\ 36,000 \\ 195,200 \end{gathered}$ |
| Dec |  |  |  | 1,400 | 122 | 170,800 | $\begin{aligned} & 700 \\ & 300 \\ & 200 \\ & \hline \end{aligned}$ | $\begin{aligned} & 100 \\ & 120 \\ & 122 \end{aligned}$ | $\begin{aligned} & 70,000 \\ & 36,000 \\ & 24,400 \end{aligned}$ |
|  |  | Cost | Sales |  |  | N537,800 |  |  |  |
| Value of Closing Inventory |  |  |  |  |  |  |  |  | N130,400 |

## SAM

Computation of Closing Inventory in a Perpetual Inventory System

| Dates |  | Purchas |  |  | Issued |  |  | Balan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Price N | Value N | Units | Price N | Value N | Units | Price N | Value N |
| Jan | 800 | 100 | 80,000 |  |  |  | 800 | 100 | 80,000 |
| Feb | 1,000 | 105 | 105,000 |  |  |  | $\begin{gathered} 800 \\ 1,000 \\ \hline \end{gathered}$ | $\begin{aligned} & 100 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{gathered} 80,000 \\ 105,000 \\ \hline \end{gathered}$ |
| Mar |  |  |  | 1,100 | 102.50 | 112,750 | 700 | 102.50 | 71,750 |
| May | 1,200 | 110 | 132,000 |  |  |  | $\begin{gathered} \hline 700 \\ 1,200 \\ \hline \end{gathered}$ | $\begin{gathered} 102.50 \\ 110 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 71,750 \\ 132,000 \end{gathered}$ |
| June |  |  |  | 1,200 | 106.25 | 127,500 | 700 | 106.25 | 74,375 |
| Sep | 1,300 | 120 | 156,000 |  |  |  | $\begin{aligned} & 700 \\ & 1,300 \end{aligned}$ | $\begin{gathered} 106.25 \\ 120 \end{gathered}$ | $\begin{gathered} \hline 74,375 \\ 156,000 \\ \hline \end{gathered}$ |
| Oct |  |  |  | 1,000 | 113.13 | 113,130 | 1,000 | 113.13 | 113,130 |
| Nov | 1,600 | 122 | 195,200 |  |  |  | $\begin{aligned} & 1,000 \\ & 1,600 \end{aligned}$ | $\begin{gathered} 113.13 \\ 122 \end{gathered}$ | $\begin{aligned} & \hline 113,130 \\ & 195,200 \end{aligned}$ |
| Dec |  |  |  | 1,400 | 117.57 | 164,598 | 1,200 | 117.57 | 141,084 |
| Cost of Sales |  |  |  |  |  | N517,978 |  |  | (141,084 |
| Value of Closing Inventory |  |  |  |  |  |  |  |  |  |

Workings of issue prices (SAM):
March:

$$
\begin{aligned}
& \text { Average Cost }=\frac{\# 100+\# 105}{2} \\
& \qquad \frac{\# 205}{2}=\mathrm{\#} 102.50
\end{aligned}
$$

June:

$$
\begin{aligned}
& \text { Average Cost }=\frac{\# 102.50+\# 110}{2} \\
& \qquad \frac{\# 212.50}{2}=\mathrm{\#} 106.25
\end{aligned}
$$

October:

$$
\begin{aligned}
& \text { Average Cost }=\frac{\# 106.25+\# 120}{2} \\
& \frac{\frac{\# 226.25}{2}}{2}=\# 113.13
\end{aligned}
$$

December:

$$
\begin{aligned}
& \text { Average Cost }=\frac{\# 113.13+\# 122}{2} \\
& \qquad \frac{\# 235.13}{2}=\# 117.57
\end{aligned}
$$

Note: Student should note that whenever inventory is sold or issued for sale, the valuation price or cost per unit is given by adding the individual unit price of the available batches prior to the sale. In our solution above, the unit prices at the point of issue or sale were divided by 2. This is not always the case as it depends on the number of batches available before the sale was made. For example, if prior to June's sale the entity purchased another batch of 900 units of toys at $£ 107 /$ unit in April, the average cost for valuing sales and inventory will be:

$$
\begin{aligned}
= & \frac{\# 102.50+N 107+\# 110}{3} \\
& \frac{\# 319.50}{3}=\# 106.50
\end{aligned}
$$

## WAM

Computation of Closing Inventory in a Perpetual Inventory System

| Dates |  | Purcha |  |  | Issued |  |  | Balan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Price N | Value N | Units | Price N | Value N | Units | Price N | Value N |
| Jan | 800 | 100 | 80,000 |  |  |  | 800 | 100 | 80,000 |
| Feb | 1,000 | 105 | 105,000 |  |  |  | $\begin{gathered} 800 \\ 1,000 \\ \hline \end{gathered}$ | $\begin{aligned} & 100 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 80,000 \\ 105,000 \\ \hline \end{gathered}$ |
| Mar |  |  |  | 1,100 | 102.78 | 113,058 | 700 | 102.78 | 71,946 |
| May | 1,200 | 110 | 132,000 |  |  |  | $\begin{gathered} \hline 700 \\ 1,200 \\ \hline \end{gathered}$ | $\begin{gathered} 102.78 \\ 110 \end{gathered}$ | $\begin{gathered} \hline 71,946 \\ 132,000 \end{gathered}$ |
| June |  |  |  | 1,200 | 107.34 | 128,808 | 700 | 107.34 | 75,138 |
| Sep | 1,300 | 120 | 156,000 |  |  |  | $\begin{aligned} & 700 \\ & 1,300 \end{aligned}$ | $\begin{gathered} 107.34 \\ 120 \end{gathered}$ | $\begin{gathered} 75,138 \\ 156,000 \end{gathered}$ |
| Oct |  |  |  | 1,000 | 115.57 | 115,570 | 1,000 | 115.57 | 115,570 |
| Nov | 1,600 | 122 | 195,200 |  |  |  | $\begin{aligned} & \hline 1,000 \\ & 1,600 \end{aligned}$ | $\begin{gathered} 115.57 \\ 122 \end{gathered}$ | $\begin{aligned} & \hline 115,570 \\ & 195,200 \end{aligned}$ |
| Dec |  |  |  | 1,400 | 119.53 | 167,342 | 1,200 | 119.53 | 143,436 |
| Cost of Sales |  |  |  |  |  | N524,778 |  |  | \# 143,436 |
| Value of Closing Inventory |  |  |  |  |  |  |  |  |  |

Workings of issue prices (WAM):
March:
Weighted Average Cost $=\frac{(800 x \# 100)+(1,000 x \# 105)}{800+1,000}$

$$
\frac{\# 231,138}{2,000}=\mathrm{A} 102.78
$$

June:
Weighted Average Cost $=\frac{(700 x \# 102.78)+(1,200 x * 110)}{800+1,000}$

$$
\frac{\# 203,946}{1,900}=£ 107.34
$$

October:

$$
\begin{aligned}
\text { Weighted Average Cost }=\frac{(700 x \# 107.34)+(1,300 x * 120)}{700+1,300} \\
\frac{\# 203,946}{2,000}=\# 115.57
\end{aligned}
$$

December:

$$
\begin{gathered}
\text { Weighted Average Cost }=\frac{(1,000 x \# 115.57)+(1,600 x \# 122)}{1,000+1,600} \\
\frac{\# 310,770}{2,600}=\# 119.53
\end{gathered}
$$

Note: As you will notice, the addition of the closing inventory and the cost of sales may not be equal to the cost of goods available for sale under the average method. Any differences arising therefore will be charged or credited to the profit or loss account for the year.

### 4.0 CONCLUSION

This Unit concludes the second part of inventory models introduced in Unit 12. Perpetual inventory is considered superior to periodic inventory system in many aspects such as frequency of updates of inventory value and cost of sales. The maintenance of a perpetual inventory system is made easy in a computerised accounting system, but would be cumbersome in a mechanical accounting system. As the student may have observed from Units 12 and 13 , the each of the methods of valuation produced different inventory values (including cost of sales) under the periodic inventory system and perpetual inventory system. With the exception of the FIFO method of valuation, comparison of the LIFO values of inventory differ under periodic and perpetual inventory systems. This disparity also occurred with respect to SAM and WAM.

### 5.0 SUMMARY

This Unit examined perpetual inventory model to complement the earlier examination of the periodic inventory model in Unit 12. Both the discussion and illustrative example illuminate the difference between periodic and perpetual inventory systems.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Explain what you understand by perpetual inventory model
2. Differentiate periodic from perpetual inventory systems.
3. The following data for the month of January relate to the records of Mimido Enterprises which deals ona 'I love mummy'branded baby nappies. On 1st January, the shop had 800 units of tools which were purchased at N10 each:

| Dates | Units <br> Purchased | Units <br> Sold | Purchase <br> price/unit <br> $\mathbf{n}$ | Sales <br> price/unit <br> $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: |
| Jan. 3 | 1,000 |  | 10.50 |  |
| Jan. 5 |  | 1,200 |  | 25 |
| Jan. 10 | 500 |  | 11 |  |
| Jan. 12 | 800 |  | 12 |  |
| Jan. 15 |  | 1,600 |  | 29 |
| Jan. 20 | 1,000 |  | 12.75 |  |
| Jan. 25 |  | 600 |  | 30 |
| Jan. 29 | 400 |  | 12.45 |  |

Required:
a. Compute the cost of sales and closing inventory using the following methods: (i) FIFO (ii) LIFO (iii) SAM, and (iv) WAM
b. Prepare a statement to show the gross profit for the period

### 7.0 REFERENCES/FURTHER READING

Hindmarch, A. and Simpson, M. (1991). Financial Accounting: an introduction, London: Macmillan

Hodge, R. (2008). Accounting: a foundation, London: Cengage Learning
Wood, F. \& Sangster, A. (2012), Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 14

## MANUAL AND COMPUTERISED ACCOUNTING SYSTEM

## CONTENTS

### 1.0 Introduction

### 2.0 Objectives

3.0 Main Content
3.1 Manual and computerised accounting system
3.2 Manual Accounting System
3.3 Computerised Accounting System
3.4 Accounting Software
3.5 Advantages of Computerised Accounting System
3.6 Risks and Mitigation of Risk in Computerised Accounting System
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Accounting is an information system that functions within an input-output system. In principle, accounting accumulates data which it processes to generate economic information to enable users of the information to make informed economic decisions. The quality of the financial data (input) used will also have implications for the quality of the resulting information (output). While accuracy is important in accounting information system, the timeliness of information processing for users' needs is equally important. Although manual system has been with us for ages and whittled down in the developed world, the advent of
computer and advanced information processing skills and tools have increasingly accorded significance to computerised accounting information system worldwide.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to distinguish between manual and computerised accounting system and the advantages of the latter over the former. The student should be able to identify the risk associated with computerised accounting system and how to mitigate such risk.

### 3.0 MAIN CONTENT

### 3.1 Manual and Computerised Accounting System

### 3.2 Manual Accounting System

Manual accounting system requires the book-keeper or accountant not only to record all the transactions from source documents but also to do postings of the various journal and ledger entries, trial balance, adjustments, final account reports and any other financial analysis of interest to the person. This means that in a manual accounting system, every data at different stages is entered on paper or into excel worksheet. Please note that using excel worksheet does not mean that the firm operates a computerised accounting system. Computerised accounting system operates where an automated accounting system that uses software is in place.

### 3.3 Computerised Accounting System

A computerised accounting system is an accounting environment in which computers are used to record, process, analyse and store financial data. In this system, unlike the manual accounting system, the book-keeper or accountant enters the financial data once and all the necessary accounts would be updated accordingly. You should note that it is not an entity's use of a computer that gives rise to a computerised accounting system but the use of accounting software to manage the accounting data. For example, if an entity makes sales on
credit and for cash and the original data are inputted into the software, it updates the relevant accounts namely, sales, cash and accounts receivable, which invariably saves the firm the time of doing paperwork to post through the different ledgers. These data are also used by the software when processing the final accounts. Although a computerised accounting system has a number of advantages or benefits as we shall see in section 3.4 below, it usually take long time to set up and the associated cost might be enormous too.

### 3.4 Accounting Software

Investopedia defines accounting software as "computer programs that assist bookkeepers and accountants in recording and reporting on a firm's financial transactions." This means that all the journals and ledgers that were done manually would be processed electronically by following different commands after keying in the input data. Accounting software enables financial transactions to be easily tracked and almost instantaneously reported and analysed. Accounting software makes the recording, analyses, communication and retrieval of accounting information easier and faster compared to manual accounting done by the bookkeeper or accountant. Although automated or computerised accounting system is expensive to set-up, it brings about reduction in the costs of accounting in the long-run while also enabling timely financial reporting and potentially better financial decision-making.

### 3.5 Advantages of Computerised Accounting System

(i) Speed due to automation: It takes less time to process accounting information and analyse it into different forms or classes. Reports for internal and external uses can easily be generated within a short space of time compared to a manual accounting system where every data at different stages would be entered on paper or into an excel worksheet. However, it might take a long time to set up a computerised accounting system.
(ii) Accuracy: The level of accuracy in a computerised accounting system is very high. However, as the saying goes, 'garbage in garbage out,' the information output will not be better than the data input. The computer cannot detect mistakes made by the employee entering data from source documents.
(iii) Data access and retrieval: Accessing and retrieval of data in a computerised system is pretty easy. The information can be processed and retrieved in different formats required by the accountant or management. In addition, the processed information can be viewed in different formats such as accounting conventional reporting format, charts, graphs, etc.
(iv) Back-up: Unlike in manual accounting system, computerised accounting system enables accounting information to be saved and stored in different locations other than the firm's office to provide data security advantage. Ability to back up records or store them in more than one location can help to mitigate the risk associated with natural disasters and record-related theft.
(v) Long-term cost efficiency: Although computerised system has high initial set-up costs, it helps the entity to reduce costs in the long-term because the expenses that would be expended on staff handling the various tasks of processing accounting data due to reduction in the number of employees handling those tasks.

### 3.6 Risk and Mitigation of Risk in Computerised Accounting System

Computerised accounting system is gaining ascendancy in accounting information system such that many organisations are migrating from paper-based accounting to computer-based system. While the computerised accounting system has the advantage of speed, accuracy (when the input data are correct), ease of retrieving information, etc., it suffers from a number of risks which appear to undermine the overarching importance of a computerised accounting system. Some identifiable risks with the computerised accounting system could emanate from
internal and external forces, or human and natural forces. However, a good internal control system must be in place to ensure the integrity and effective monitoring of the computerised accounting system. The following are highlights of risks which may expose an entity's computerised accounting system to security threats:
(i) Inaccurate data entry: This may arise as a mistake from the data entry staff that may inadvertently enter wrong input data or figures. It might also arise from the data entry staff intentionally entering wrong figures to secure some personal advantage. Whereas the former scenario is due to error, the latter is due to fraud. Risk of inaccurate date entry can be mitigated by committing the data entry duties to very careful and highly dedicated and motivated staff. Opportunity for a second look by an independent staff might also help, but the staff must be truly independent to avoid any possible collusion.
(ii) Another risk may arise when an entity's staff inadvertently or erroneously deletes useful data. This risk can be overcome when there is a back-up system in place. In addition, constant training and retraining of staff can also help in this area. Another mitigating measure is the entity's use of accounting software that does not carry out a delete prompt without seeking confirmation from the person working on the data.
(iii)An uncontrolled or unauthorised access to the data or accounting system. Such incidence might arise internally where unauthorised employees can have access to the system. While unauthorised access from among staff of the entity is very unlikely, external access by hackers is likely and can compromise the integrity of the entity's system. To avoid internal unauthorised access, only those with authorised access code (i.e., password)should be permitted to gain access to the system and such access code can be changed from time to time. Access codes
should not be shared but strictly made personal to the authorised individuals. In order to prevent the system from hackers especially where the system interfaces with internet suite, adequate internet security should be in place.
(iv) Viruses are potential risk to computerised accounting system. This can be overcome by installing good self-updating anti-virus or internet security.
(v) Natural disaster such as flood, fire, water, etc., can destroy electronic documents. Power outages, although not completely natural, could result in fire or breakdown of computers. In order to overcome the risk of power outages, the computers housing the accounting systems should constantly be connected to UPS (uninterrupted power supply). Having external back-ups [usually kept outside the organisation] can protect an entity against the risk of natural disaster.

### 4.0 CONCLUSION

This Unit essentially examined computerised accounting system which is an automated accounting information system compared to the manual system. However, the discussion and importance of the computerised accounting system are not much appreciated without highlighting the manual accounting system. Computerised accounting system aids faster information processing, reporting and retrieval. But such system, like any systems, has its advantages and disadvantages.

### 5.0 SUMMARY

Manual accounting system is one in which the book-keeper or accountant enters the financial data and do the various analysis manually. But in a computerised accounting system, the book-keeper or accountant only enters the data from source documents and thereafter uses computer commands to carry out the processing and analysis of the financial data to generate different types of financial report. Although computerised accounting system has many advantages, it equally has some risks or shortcomings.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by computerised accounting system?
2. Distinguish between manual and computerised accounting system.
3. State five advantages of a computerised accounting system.
4. What is accounting software?
5. Computerised accounting system like any other computerised system is exposed to various risks. Identify the risks a computerised accounting system can be exposed to and explain how they can be mitigated or prevented?

### 7.0 REFERENCES/FURTHER READING

https://www.ukessays.com/essays/business/risks-and-threats-of-accounting-informationsystem.php Accessed 18 November 2016
http://www.investopedia.com/terms/a/accounting-software.asp Accessed 18 November 2016 http://www.cleveraccounting.com/9-advantages-computerized-accounting/ Accessed 18 Nov 2016

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## UNIT 15

## THE CONCEPTUAL FRAMEWORK AND ACCOUNTING POLICY

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 IASB Conceptual Framework
3.2 General Purpose Financial Reporting
3.3 Qualitative Characteristics of Useful Financial Statements
3.3.1 Fundamental Qualitative Characteristics
3.3.1 Enhancing Qualitative Characteristics
3.4 The Elements of Financial Statements
3.5 Accounting Policies
3.6 Changes in Accounting Estimates
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit introduces the International Accounting Standards Board's (IASB) conceptual framework which is a critical articulation involving the preparation of financial statements. This Unit also highlighted the meanings of accounting policies and changes in accounting estimates, which are regularly used concepts in financial statements preparation and
presentation. The various definitions would adopt the technical definitions provided by the IASB.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to define the conceptual framework for the preparation and presentation of financial statements and general purpose financial statements. The student should be able to itemise and explain the fundamental and enhancing qualitative characteristics of financial statements. In addition, the student is expected to know and be able to explain in technical terms the elements of financial statements, accounting policies and accounting estimates.

### 3.0 MAIN CONTENT

### 3.1 IASB Conceptual Framework

The IASB conceptual framework is not an accounting standard but a framework that is intended to, among other things, assist in the: preparation and presentation of financial statements, development of future International Financial Reporting Standards (IFRS) as well as reviewing existing ones and, interpretation of the information contained in the financial statements by the information users. Although it does not qualify as a theory, it approximately serves a theoretical purpose in the context of the preparation and presentation of financial statements. In essence, the framework covers very prominent issues relating to financial reporting such as: the objective of general purpose financial reporting, qualitative characteristics of financial information, elements of the financial statements, and the concepts of capital and capital maintenance. In this Unit, however, we shall not concern ourselves with the concept of capital and capital maintenance which is deliberately left for a more advanced Unit in financial reporting.

### 3.2 General Purpose Financial Reporting

The financial statements of an entity are primarily the statement of comprehensive income, statement of financial position and cash flow statement. According to the Framework, the objective of the general purpose financial reporting [shortened as financial reporting] is to "provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity." It gives information to users who have interests in the business to decide whether or not to invest in the business. As you have already learned about the users of financial statements in Introduction to Financial Accounting I, you are aware that the needs of the users are diverse. However, the focus of financial statements is to meet the needs of investors who are generally regarded as the primary users.

### 3.3 Qualitative Characteristics of Useful Financial Statements

The conceptual framework highlights the qualitative characteristics that give rise to decisionuseful information and these are broadly categorised as fundamental and enhancing qualitative characteristics.

### 3.3.1 Fundamental Qualitative Characteristics

According to the framework, financial information is considered useful if it is relevant and faithfully represents what it purports to represent. The two fundamental characteristics are relevance and faithful representation. Financial information is relevant if it can make a difference in a decision-making process in terms of predicting the future or providing feedback to previous evaluation, or both. Faithful representation of a financial information means that the information is complete, neutral and free from error.

### 3.3.2 Enhancing Qualitative Characteristics

These qualitative characteristics are deemed to enhance the usefulness of the fundamental qualitative characteristics. This means that in addition to information being relevant and faithfully represents an economic event, it must have the following qualities namely,
comparability, verifiability, timeliness and understandability. In terms of comparability, the information must be capable of being compared from period to period within the same entity or in a single period across entities. Comparability is underpins the accounting convention of consistency. Verifiability means that the information will permit different independent and knowledgeable people to reach consensus to a large extent that a particular estimate or value faithfully represents economic reality. Where reported information about a phenomenon is complex, the usual practice is to make a disclosure of the underlying assumptions, methods of compiling the information as well as relevant factors in support of the information.

Timeliness means that information should be made available early to the users of the information for the purpose of decision-making. This is because even though information is relevant and faithfully represents what it purports to represent, it loses its value if not released on time. Understandability, according to the framework, financial information should be made understandable to users of the information in terms of classification, characterisation and presentation in a clearly manner. However, the framework expects the users to have some reasonable knowledge of economic activities and business; in other words, the users are not expected to be laymen in relation to financial accounting information.

### 3.4 The Elements of Financial Statements

The elements of financial statements as defined by the conceptual framework are assets, liabilities, income, expenses and equity. We shall now discuss these in turn.

Assets: An asset is "a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity" [CF: 4:4(a)]. According to the conceptual framework, certain assets may have physical form while other may not. For example, copyrights, patents, trademarks, etc., are assets that could attract future economic benefits to an entity but they do not have physical form. Assets that have physical form include land and building, equipment, motor vehicles, cash and so on. What is important is
that the asset is owned and controlled by the entity and it can attract future economic benefits. Two factors that qualify an asset to be recognised in the statement of financial position are: first, it is probable that the asset will accrue future economic benefits; second, the cost/value of the asset can be reliably measured.

Liabilities: A liability, according to the Framework, is "a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow form the entity of resources embodying economic benefits" [CF:4.4(b)]. This means that a liability will create the obligation for the entity to give up resources that can produce economic benefits and such payments could be in the form of cash, transfer of other assets, or the replacement of one obligation with another obligation [CF:4.17]. Like an asset, a liability is recognised in the statement of financial position if two factors are satisfied, that is, if it is probable the liability will result in the outflow of resources that have the capacity to yield future economic benefits and the liability payable can be reliably measured. Examples of liabilities are accounts payable, debentures, loans, non-trade payables, etc.

Income: It is defined by the Framework as "increases in economic benefits during the accounting period in the form of inflows or enhancements of assets, or decreases of liabilities, that result in increases in equity, other than those relating to contributions from equity participants" [CF:4.25(a)]. The Framework divides income into revenues and gains. Revenues are regarded as income that arises from an entity's ordinary business activities which could be in the form of sales, fees, royalties and rent, dividend and interest. Gains are income but do not arise from the course of the ordinary activities of an entity. For example, the gains that comes from the disposal of non-current assets, revaluation surplus of noncurrent assets or financial instruments.

Expenses: They are defined as "decreases in economic benefits during the accounting period in the form of outflows or depletions of assets, or incurrences of liabilities, that result in
decreases in equity, other than those relating to distributions to equity participants" [CF:4:25(b)]. What constitute expenses in a period is governed by the matching concept which enables costs that are incurred to be matched against the items of earnings or income generated by the expenses in that period. In doing so, revenue expenditures for the period are charged to profit or loss while capital expenditure is allocated to the period based on the entity's chosen accounting policies.

Equity: According the Framework, equity is "the residual interest in the assets of an entity after deducting all of its liabilities" [CF:4.4(c)]. Equity can be classified differently in the statement of financial position depending on the nature of the entity. For a sole proprietorship form of business, the equity will include such things as capital and profit for the period less drawings. For a company, equity may include such things as share capital, retained earnings and other forms of capital and revenue reserves.

### 3.5 Accounting Policies

IASB's definition of accounting policies is contained in International Accounting Standard (IAS) 8. The standard defines accounting policies as "the specific principles, bases, conventions, rules and practices applied by an entity in preparing financial statements." An entity's management reserves the judgement on the choice of accounting policies to adopt in an entity. Accounting policies are to be consistently applied from period to period for similar transactions. The IAS 8 provides that an accounting policy can be changed only if the change:
(i) Is required by an International Financial Reporting Standard; or
(ii) Results in financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows.

But where an entity changes its accounting policies for a justifiable reason, it needs to state the effects of those changes on the financial statements of earlier periods except where this is
impracticable. Examples of an entity's accounting policies include: methods of depreciation of non-current assets, methods of valuing inventories; valuation of investment property or securities.

### 3.6 Accounting Estimates

According to Section 32 of IAS 8, "accounting estimates arise from inherent uncertainties in business activities which mean that many items in financial statements cannot be measured with precision but can only be estimated. Estimates are formed using judgements based on the latest available, reliable information." Examples of accounting estimates are:

- Allowances for bad debts;
- Allowances for inventory obsolescence;
- Fair value of financial assets or financial liabilities;
- The useful lives of, or the expected pattern of consumption of future economic benefits embodied in, depreciable assets; and
- Warranty obligations.

IAS 8 also defines changes in accounting estimates as:
"An adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligation associated with, assets and liabilities. Changes in accounting estimates results from new information or new developments and, accordingly, are not correction of errors."

Where a change in accounting estimates occurs, the change is adjusted in the profit or loss account of the year and, unlike changes in accounting policy, no retrospective adjustment would be required. For example, if allowance for bad debts increases on the basis of new and more reliable information available to management, the difference arising from change in estimate is recognised in the profit or loss of the year. If inventory is written off on the basis
of estimated obsolescence, this is also written off to income statement as an accounting estimate. But if the value of inventory estimates changes as a result of a change in the inventory valuation method, the resulting estimates would pass for a change in accounting policy rather than a change in accounting estimate.

### 4.0 CONCLUSION

This Unit has examined the conceptual framework for the preparation and presentation of financial statements. It is an important framework because the entire body of accounting standards developed by IASB draws on this framework for the purpose of developing and interpreting accounting standards. It is the conceptual definitions provided by this framework with respect to assets, liabilities, income, expenses and equity that permeate the different accounting or reporting standards.

### 5.0 SUMMARY

The conceptual framework is an all-important framework in financial reporting history to lay the foundation that provides anchorage for the development and interpretation of accounting/reporting standards in terms of recognition, measurements and disclosures of economic transactions. The framework explicates the objectives of the general purpose financial reporting and the fundamental and enhancing qualitative characteristics of the financial statements. It also conceptualises the elements of financial statements, thus providing guidance for how those elements are recognised, measured and disclosed within the contexts of various accounting/reporting standards.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by the IASB conceptual framework?
2. What is general purpose financial reporting in the context of users of financial reporting information?
3. Itemise and define five elements of financial statements.
4. Explain what you understand by fundamental qualitative characteristics and enhancing qualitative characteristics of financial statements.
5. Supporting your answers with examples, distinguish between changes in accounting policies and changes in accounting estimates.

### 7.0 REFERENCES/FURTHER READING

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Education
Limited

## UNIT 16

## FINANCIAL STATEMENT OF A SOLE TRADER - INCOME STATEMENT

## CONTENTS

### 1.0 Introduction

2.0 Objectives
3.0 Main Content
3.1 Statement of Comprehensive Income
3.2 Determination of Gross Profit
3.3 Other (Comprehensive) Income
3.4 Charging Expenses
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This and the following two Units focus on the financial statements of a sole trader or sole proprietorship form of business. In this Unit, our focus is on the statement of comprehensive income or simply income statement of a sole proprietorship. Various accounting concepts underpinning the preparation of financial statements have been discussed in Introduction to Financial Accounting I and this Unit will present income statement which invariably incorporates those relevant concepts. All business entities want to know how they are performing in their operations. They want to know how much revenue they are able to
generate in a particular period and how well that has translated into profit or loss. The primary information the business requires to make this assessment is provided by the income statement.

### 2.0 OBJECTIVES

After studying this Unit, the student should be able to identify and distinguish between items that are used in determining gross profit and net profit. The student should also be able to make adjustments to expenses incurred but unpaid for as well as unexpired recurrent expenditure. Similarly, the student should be able to adjust for deferred revenues.

### 3.0 MAIN CONTENT

### 3.1 Statement of Comprehensive Income

The comprehensive income provides the information relating to the performance of an entity in a financial year. It measures whether an entity makes a profit or loss in a period. Basically, it measures the trading and operating performances of an entity. Generally, the statement of comprehensive income comprises two aspects based on IASB's guidelines: the profit or loss and other comprehensive income. However, at this introductory level, the IASB format is put on hold on to a higher level course in financial accounting so that the basic issues in income statement can be covered at this level.

### 3.2 Determination of Gross Profit

The primary measure of the trading performance in an entity is the gross profit, which is simply the difference between the sales revenue and cost of sales. It is very unlikely that any business entities will have a gross loss; otherwise they are not fit to be in operational existence. It measures the efficiency in transforming inventories into sales revenues. In determining the gross profit, adjustment must be made to sales if the sales revenue has any part that relates to future sales. All direct costs relating to the goods sold are added to the cost of goods sold and subtracted from sales. Examples of such costs include warehouse wages,
purchases-related wages, and freight on purchases (or carriage inwards). But carriage outwards (i.e. costs incurred to deliver goods sold to customers) is not charged as directly related to the cost of sales because they are not part of what constitute the money worth of the goods sold. This latter cost is an expense because they do not affect the value of goods sold or inventories held. Consequently, it is expensed or charged to the profit or loss account. The higher the gross profit, the higher the income available to meet expenses and earn a profit or reduce loss.

### 3.3 Other (Comprehensive) Income

An entity may sometimes earn income from other transactions different to its primary income-earning activities such as sales for a merchandising firm. The entity may earn income from other sources such as rent, profit from sale of non-current assets or investments, and commission, for example. Other income might also accrue to an entity by receiving discounts from its suppliers (discounts received), recovered bad debts previously written off, and reduction in the allowance for doubtful debts. All these increase the income available to cover operating expenses and profit. Usually, this group of income is insignificant compared to the amount generated from the entity's primary source(s) of revenue.

### 3.4 Charging Expenses

Expenses are generally the indirect costs incurred by an entity to generate its revenue. These costs must be charged against the revenue they help to generate in compliance with the matching concept in accounting. This means that all revenue expenses (see Unit 6) will be fully expensed or charged to profit or loss. In doing so, there is need to make necessary adjustments for accruals and prepayments (see Unit 8 ) so that costs relating to the current accounting year but has not been paid for will be added and costs not relating to the year but paid for in the current accounting year will be subtracted accordingly. However, not all expenses incurred in the financial year can be charged in whole to profit or loss of that year,
except that the accruing benefits expire in that year. As we have studied in Units 9-11, capital expenditure may be incurred in a particular year, but only an estimated portion of it is allocated to profit or loss so that the cost is spread over the asset's estimated useful life.

### 3.5 Illustrative example

The following list of balances was extracted from the books of Mummy Is Good as at 31 December 2015:

|  | N | N |
| :---: | :---: | :---: |
| Purchases and sales | 150,000 | 272,000 |
| Inventory (1/1/2015) | 4,000 |  |
| Rent and rates | 4,500 |  |
| Motor running expenses | 3,000 |  |
| Salaries and wages | 54,000 |  |
| Insurance | 2,600 |  |
| Cash and bank | 13,000 |  |
| Accounts receivable and payable | 34,000 | 12,000 |
| Allowance for doubtful debts |  | 1,000 |
| Sundry expenses | 500 |  |
| Buildings (at cost $\pm 100,000)$ | 80,000 |  |
| Furniture (at cost $\ddagger 10,000$ ) | 6,800 |  |
| Motor vehicles (at cost $£ 25,000$ ) | 19,600 |  |
| Drawings | 25,000 |  |
| Capital |  | 112,000 |
|  | $\underline{\underline{397,000}}$ | $\underline{\underline{397,000}}$ |

Additional information:
i. Inventory at the end of the year is $¥ 30,000$
ii. Rent owing at as 31 December 2015 amounted to $\mathbb{N} 500$.
iii. Part of the wages and salaries is $£ 1,800$ wages for offloading goods to warehouse.
iv. The following rates are to be applied on the non-current assets:
a. Building $5 \%$ on written down value
b. Motor vehicle $20 \%$ on cost
c. Furniture $20 \%$ on reducing balance
v. Sales included $\mathbb{N}, 000$ for delivery to be made in June, 2016.
vi. Allowance for accounts receivable is to be adjusted to $2 \%$

## Required:

a. Prepare the adjusting entries
b. Prepare the statement of comprehensive income for the year.

## SOLUTION

## Solution to example

## (a)

| Dr | Rent and Rates A/C |  | Cr |
| :--- | :---: | :--- | :---: |
|  |  |  |  |
| Bal b/f |  |  |  |
| Bal. c/f |  | Profit or loss | $\underline{5,000}$ |
|  | $\underline{N 5,000}$ | Bal. b/f | $\underline{\underline{N 5,000}}$ |
|  |  |  |  |


| Dr | Wages and Salaries A/C |  | Cr |
| :--- | ---: | :--- | :---: |
|  | N |  | N |
| Bal b/f |  | Trading a/c | 1,800 |
|  | $\underline{\underline{54,000}}$ | Profit or Loss | $\underline{\underline{52,200}}$ |
|  |  |  | $\underline{\underline{N 54,000}}$ |
|  |  |  |  |


| Dr | Allowance for Depreciation A/C (Building) |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bal. b/f | 20,000 |
| Balc/f | $\underline{24,000}$ | Profit or Loss | 4,000 |
|  | N24,000 |  | N24,000 |
|  |  | Bal. b/f | \#24,000 |


| Dr | Allowance for Depreciation A/C (Motor Vehicles) |  |  |
| :---: | :---: | :---: | :---: |
| Bal c/f | N |  | N |
|  |  | Bal. b/f | 5,400 |
|  | 10,400 | Profit or Loss | 5,000 |
|  | \#10,400 |  | \#10,400 |
|  |  | Bal. b/f | \#10,400 |


| Dr | Allowance for Depreciation A/C (Furniture) |  | Cr |
| :---: | :---: | :---: | :---: |
| Bal c/f | N |  | N |
|  |  | Bal. b/f | 3,200 |
|  | 4,560 | Profit or Loss | 1,360 |
|  | ^4,560 |  | \#4,560 |
|  |  | Bal. b/f | \# 4,560 |


| Dr | Allowance for Doubtful Debts A/c |  | Cr |
| :---: | :---: | :---: | :---: |
| Profit or Loss Bal c/f | N |  | \# |
|  | 320 |  |  |
|  | 680 | Bal. b/f | 1,000 |
|  | $\mathrm{N} 1, \underline{000}$ |  | \#1,000 |
|  |  | Bal. b/f | \#680 |
| Dr | Sales A/c |  | Cr |
|  | N |  | N |
| Deferred income | - 5,000 |  |  |
| Trading A/c | 267,000 | Bal. b/f | 272,000 |
|  | N272,000 |  | ²72,000 |


| Dr | Deferred Income A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  | $\underline{N}$ |  | $\mathbf{N}$ |
| Bal. c/f | $\underline{\underline{5,000}}$ | Sales | $\underline{\underline{5,000}}$ |
|  |  | Bal. b/f | $\underline{£ 5,000}$ |

(b)

Mummy Is Good
Statement of comprehensive income for the year ended 31st December, 2015

|  | N | N |
| :---: | :---: | :---: |
| Sales |  | 267,000 |
| Less: cost of goods sold: |  |  |
| Opening inventory | 4,000 |  |
| Add: Purchases | 150,000 |  |
| Wages | 1,800 |  |
|  | 155,800 |  |
| Less: Closing inventory | $(30,000)$ |  |
| Cost of goods sold |  | $(125,800)$ |
| Gross Profit |  | 141,200 |
| Add: Other income: |  |  |
| Allowance for receivable |  | 320 |
|  |  | 141,520 |
| Less: Expenses: |  |  |
| Rent and rates | 5,000 |  |
| Motor running expenses | 3,000 |  |
| Salaries | 52,200 |  |
| Insurance | 2,600 |  |
| Sundry expenses | 500 |  |
| Depreciation: |  |  |


| Building | 4,000 |
| :--- | :--- |
| Furniture | 1,360 |
| Motor vehicle | $\underline{5,000}$ |

$$
73,660
$$

N67,860

### 4.0 CONCLUSION

In order to ascertain the performance of a business entity, it prepares income statement as part of its financial statements. The income statement provides an historic performance as to whether the entity is making profit or loss.

### 5.0 SUMMARY

Income statement or statement of comprehensive income helps an entity to assess its economic performance in a given accounting period. It provides information regarding gross profit as well as net profit or loss. Broadly speaking, profit or loss is ascertained by deducting relevant expenses from the revenue for the year. A loss occurs when the entity's revenue is less than its expenses whereas a profit is made when the entity's revenue exceeds its expenses. More specifically, the difference between revenue and cost of sales is gross profit while the difference between gross profit and expenses is net profit or loss.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by income statement?
2. Distinguish between gross profit and net profit.
3. How would you relate accruals and prepayments to the income statement?

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning
Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education
Wood, F. \& Sangster, A. (2012).Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 17

## FINANCIAL STATEMENT OF A SOLE TRADER - FINANCIAL POSITION

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Statement of Financial Position
3.2 Assets Structure
3.3 Financial Structure
3.4 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

The duality principle in accounting is clearly visible in the accounting equation and invariably the statement of financial position. All assets owned by an entity are financed by equity or liability, or both. This shows that assets are represented by liabilities and equity. In order to understand the financial position of an entity depicted by the accounting equation, the entity is expected to prepare and present a statement of financial position which captures all the entity's assets, liabilities, and equity (which includes the performance of the entity as captured by the statement of comprehensive income, i.e., profit/(loss)). This Unit therefore examines a modest statement of financial position of a sole proprietorship form of business.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to describe what a statement of financial position is as well as the contents of the statement. The student should also be able to distinguish between financial structure and assets structure and prepare a statement of financial position.

### 3.0 MAIN CONTENT

### 3.1 Statement of Financial Position

The statement of financial position is one of the major financial statements of an entity. As its title suggests, it shows the financial position which captures all the assets of the entity and the sources of funding or acquiring those assets at a point in time. Basically, the statement of financial position comprises the summary of assets and financial structure. The statement of financial position is summarised by the accounting equation given as: Assets = Capital/Equity + Liabilities $[\mathrm{A}=\mathrm{C}+\mathrm{L}]$.

### 3.2 Assets Structure

The assets structure summarises the classes of assets employed by the entity in a particular accounting period. It classifies the assets according to their durability or estimated time of expiration. On this basis, assets are broadly categorised into two groups namely, non-current assets (see Units 9-11 for detail) and current assets (see Unit 4 for detail).

### 3.3 Financial Structure

An entity acquires its assets with the resources available to it. These resources are usually a pool of resources from the owner of the business and credit facilities from external sources. Financial structure comprises both the short-term and long-term sources of fund a business used to finance its total assets. The long-term comprises long-term liabilities and owner's capital invested in the business including the profit not withdrawn (see Unit 5), while the
short-term - also referred to as current liabilities (see Unit 4) - derives from short-term loans and credits arising from the normal business practices. Examples of credit facilities arising from the normal course of business practices are accounts payable and accrued expenses. Whereas short-term loans attract interest charges, these conventional business credits do not attract any interests. However, the excessive use of such facilities as a means of financing assets suggests that the firm is trading beyond its capacity of long-term survival.

### 3.4 Illustrative examples

The following list of balances was extracted from the books of Mummy Is Good as at 31 December 2015:

|  | $\ldots$ | N |
| :---: | :---: | :---: |
| Purchases and sales | 150,000 | 272,000 |
| Inventory (1/1/2015) | 4,000 |  |
| Rent and rates | 4,500 |  |
| Motor running expenses | 3,000 |  |
| Salaries and wages | 54,000 |  |
| Insurance | 2,600 |  |
| Cash and bank | 13,000 |  |
| Accounts receivable and payable | 34,000 | 12,000 |
| Allowance for doubtful debts |  | 1000 |
| Sundry expenses | 500 |  |
| Buildings (at cost $\pm 100,000$ ) | 80,000 |  |
| Furniture (at cost $\pm 10,000$ ) | 6,800 |  |
| Motor vehicles (at cost $\ddagger 25,000$ ) | 19,600 |  |
| Drawings | 25,000 |  |

## Capital

$\qquad$
\#397,000
\#397,000
Additional information:
i. Inventory at the end of the year is $¥ 30,000$
ii. Rent owing at as 31 December 2015 amounted to $£ 500$.
iii. Part of the wages and salaries is $£ 1,800$ wages for offloading goods to warehouse.
iv. The following rates are to be applied on the non-current assets:
a. Building $5 \%$ on written down value
b. Motor vehicle $20 \%$ on cost
c. Furniture $20 \%$ on reducing balance
v. Sales included $\AA 5,000$ for delivery to be made in June, 2016.
vi. Allowance for accounts receivable is to be adjusted to $2 \%$

Required:
a. Prepare the adjusting entries
b. Prepare the statement of financial position for the year.

## SOLUTION

(a)

| Dr | Rent and Rates A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Bal b/f | 4,500 |  |  |
| Bal. c/f | 500 |  |  |
|  | N5,000 | Profit or loss | 5,000 |
|  |  |  | N5,000 |
|  |  | Bal. b/f | \#500 |


| Dr | Wages and Salaries A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | $\pm$ |  | \# |
|  |  | Trading a/c | 1,800 |
| Bal b/f | 54,000 | Profit or Loss | 52,200 |
|  | N54,000 |  | N54,000 |


| Dr | Allowance for Depreciation A/c (Building) |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bal. b/f | 20,000 |
| Bal c/f | 24,000 | Profit or Loss | 4,000 |
|  | N24,000 |  | N24,000 |
|  |  | Bal. b/f | \#24,000 |
| Dr | Allowance for Depreciation A/c (Motor Vehicles) |  | s) Cr |
| Bal c/f | N |  | N |
|  |  | Bal. b/f | 5,400 |
|  | 10,400 | Profit or Loss | 5,000 |
|  | N10,400 |  | \$10,400 |
|  |  | Bal. b/f | \#10,400 |


| Dr | Allowance for Depreciation A/c (Furniture) |  | Cr |
| :---: | :---: | :---: | :---: |
|  | $\pm$ |  | \# |
|  |  | Bal. b/f | 3,200 |
| Bal c/f | 4,560 | Profit or Loss | 1,360 |
|  | ^4,560 |  | \#4,560 |
|  |  | Bal. b/f | \# 4,560 |


| Dr | Allowance for Doubtful Debts A/c [FDD] |  |  |
| :--- | ---: | :--- | :---: | Cr


| Dr | Sales A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
| Deferred income | 5,000 |  |  |
| Trading a/c | 267,000 | Bal. b/f | 272,000 |
|  | N272,000 |  | N272,000 |


| Dr | Deferred Income A/c |  | Cr |
| :--- | :---: | :--- | ---: |
| Bal. c/f | $\underline{\mathrm{N}}$ |  | $\underline{\mathrm{A}}$ |
|  | $\underline{\underline{5,000}}$ | Sales | $\underline{\underline{5,000}}$ |
|  |  | Bal. b/f | $\underline{\underline{N, 000}}$ |

NOTE: Only the accounts that have closing balances will appear in the statement of financial position. These are simply the accounts that have balances after the end of year adjustments as indicated by the $\mathrm{c} / \mathrm{f}$ figures.
(b)

## Mummy Is Good

Statement of Financial Position as at 31st December, 2015

| Non-current assets: | Cost | Dep | NBV |
| :---: | :---: | :---: | :---: |
|  | N | N | N |
| Building | 100,000 | $(24,000)$ | 76,000 |
| Motor vehicles | 25,000 | $(10,400)$ | 14,600 |
| Furniture | $\underline{10,000}$ | (4,560) | 5,440 |
|  | $\underline{\underline{135,000}}$ | $\underline{(38,960)}$ | 96,040 |
| Current assets: |  |  |  |
| Inventories | 30,000 |  |  |
| Accounts receivable 34,000 |  |  |  |
| Less: Allowance FDD (680) 33,320 |  |  |  |
| Cash and bank | 13,000 | 76,320 |  |
| Current liabilities: |  |  |  |
| Accounts payable | 12,000 |  |  |
| Accrued rent and rates | 500 |  |  |
| Deferred income | 5,000 |  |  |
|  | $(17,500)$ |  |  |
| Net current assets |  |  | 58,820 |
| Total assets less current liabilities |  |  | $\underline{\underline{154,860}}$ |
| Financed by: |  |  |  |
| Capital |  |  | 112,000 |
| Add: Net profit (see Unit 15's illustrative example) |  |  | $\underline{67,860}$ |
|  |  |  | 179,860 |

### 4.0 CONCLUSION

An important aspect of the financial statement is the statement of financial position which summarises the assets of an entity and the various sources of funding those assets. While the assets in the statement of financial position comprise current assets and non-current assets, the assets are usually funded by current liabilities, long-term liabilities and owners' equity. In sum, the statement of financial position captures the accounting equation.

### 5.0 SUMMARY

The statement of financial position provides a summary of the assets of an entity and all the claims against those assets. Statement of financial position summaries both the asset structure and financial structure. The asset structure shows the composite of current assets and noncurrent assets. But financial structure shows all the composite claims against those assets, and broadly, it comprises all liabilities (current/short-term and long-term) and owners' equity.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Define assets structure, financial structure and capital structure.
2. What is the difference (if any) between the trial balance and the statement of financial position?

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education

Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 18

## FINANCIAL STATEMENT OF A SOLE TRADER - COMPREHENSIVE <br> ILLUSTRATION

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Statements of Comprehensive Income and Financial Position
3.2 Comprehensive Illustrative Example
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

While Units 16 and 17 respectively addressed the components and mechanics of the statement of comprehensive income and statement of financial position respectively, this Unit looks at these two statements holistically as well as introduces some more complex adjusting entries into the preparation of these financial statements.

### 2.0 OBJECTIVES

At the end of this Unit, the student is expected to be able to make more complex adjustments such as end of year adjustments and adjustments for errors in the books of accounts. Moreover, the student should be able to extract relevant information from a mass of data embedded within narratives.

### 3.0 MAIN CONTENT

### 3.1 Statements of Comprehensive Income and Statements of Financial Position

Having already discussed these in Units 16 and 17, further discussions are ignored as the focus of this Unit is to introduce the student to a real life complex scenario.

### 3.2 Comprehensive Illustrative Example

Mr Okiemute is a Warri-based businessman who recently retired from active service from the Delta State Civil Service as a Permanent Secretary. Following his retirement and receipt of retirement benefits, he registered a business called Life Begins At Sixty Ventures for supplies of Cement and other industrial materials and commenced business operations on 1st July 2015 paying a cash value of $\$ 49,675,000$ into the business account. As part of Mr Okiemute's retirement benefits, he was allowed to retain his two official vehicles which are valued at $¥ 4,500,000$ each. He ploughed one of these cars and a personal truck into this business. A local car dealer was ready to pay $\ddagger 2$ million for this truck until Okiemute's business adviser recommended a truck for the business. Upon second thought, Mr Okiemute retained the truck for his business use.

Mr Okiemute employed his late uncle's unemployed son, PeeJay, who had graduated with a Certificate of Attendance in Accounting from Zombie University many years ago. PeeJay extracted the trial balance below after recording all the transactions he thought were necessary to be accorded accounting treatments. He did not know how to account for the motor vehicles Mr Okiemute brought into the business and decided to ignore them altogether. He included the motor running expenses of Mr Okiemute's private fleet of cars as part of the business' motor vehicle expenses $¥ 490,000$. PeeJay also treated $\ddagger 20$ million Mr Okiemute took from the business as director's salaries and this is included in the salaries and wages. Moreover, he did not know how to design an accounting policy for depreciation and so made no allowance for depreciation. After extracting the trial balance, PeeJay discussed his
confusion about the accounting policy for depreciation with his old school friend who is now a member of the Institute of Chartered Accountants of Nigeria. He accepted his friend's recommended policies for depreciation as follows:

Motor vehicles: $20 \%$ at cost
Equipment: 20\% reducing balance
Furniture: Sum of the years' digit based on 5 years useful life approximated to the nearest N'000

|  | N'000 | N'000 |
| :--- | ---: | ---: |
| Purchases and Sales | 254,810 | 401,400 |
| Carriage outwards | 2,850 |  |
| Carriage inwards | 760 |  |
| Capital |  | 49,675 |

Drawings $\quad 8,600$

Cash at bank 4,220
Cash in hand 312
Accounts receivable 38,220
Accounts payable 16,300
Long-term bank loan 10,000
Inventory (1 July 2015) 72,410
Equipment $\quad 13,000$
Furniture $\quad 10,000$
Motor vehicle expenses $\quad 1,490$
Sundry expenses 298
Rent 8,200
Office expenses 310

| Wages and salaries | 59,600 |  |
| :--- | ---: | ---: |
| Insurance | 745 |  |
| Telephone charges | 680 |  |
| Returns | $\underline{2,110}$ | $\underline{1,240}$ |
|  | $\underline{1478,615}$ | $\underline{147,615}$ |

Additional information:
(i) Inventory as at 30 June 2016 amounted to $£ 85,000,000$. Goods supplied by Mr Okiemute's bosom friend, Ajayi Plenty, to enable a smooth take off of Life Begins At Sixty was captured by PeeJay as opening inventory because it was the first batch of goods the business started its operations with.
(ii) Some employees took salaries advance relating to their next year's salaries amounting to $\# 350,000$.
(iii)Rent owing $\pm 500,000$
(iv) The business charges $¥ 80,000$ of Mr Okiemute's family's telephone charges to the business.
(v) Part of the sundry expenses was income tax of $\# 100,000 \mathrm{Mr}$ Okiemute paid to the State Internal Revenue Service.

Required:
(a) Prepare the adjustment entries relevant to prepare a complete financial statement for the year.
(b) Prepare the statement of comprehensive income for the year ended 30 June 2016
(c) Prepare the statement of financial position as at 30th June, 2016

## SOLUTION

(a)


| Dr | Motor Vehicles A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \# ${ }^{\prime} 000$ |  | +'000 |
| Capital A/c | 6,500 | Bal. c/f | 6,500 |
|  | $\cdots$ |  | ^6,500 |
| Bal. b/f | \#6,500 |  |  |


| Dr | Motor Vehicle Expenses A/c |  | Cr |
| :--- | ---: | :--- | ---: |
|  | N $^{\prime} 000$ |  | $\mathbf{N}^{\prime} 000$ |
|  |  | Drawings A/c | 490 |
| Bal. b/f | $\underline{1,490}$ | Profit or Loss A/c | $\underline{1,000}$ |
|  | $\underline{1,490}$ |  | $\underline{1,490}$ |


| Dr | Drawings A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N'000 | Bal. c/f | N'000 |
| Bal. b/f | 8,600 |  |  |
| Motor vehicle Expenses A/c 490 |  |  |  |
| Telephone charges A/c | 80 |  |  |
| Income tax A/c (Note 1) | 100 |  |  |
| Salaries and wages A/c | 20,000 |  | 29,270 |
|  | +29,270 |  | + 29.270 |
| Bal. b/f | \#29,270 |  |  |


| Dr | Income Tax A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  | $\underline{N^{\prime} 000}$ |  | $\underline{N^{\prime} 000}$ |
| Sundry expenses A/c | $\underline{100}$ | Drawings A/c | $\underline{100}$ |
|  | $\underline{N 100}$ |  | $\underline{\underline{N 100}}$ |


| Dr | Sundry Expenses A/c |  | Cr |
| :--- | :---: | :--- | :---: |
|  | $\underline{N^{\prime}} 000$ |  | $\mathbf{N}^{\prime} 000$ |
| Bal. b/f |  | Income tax A/c | 100 |
|  | $\underline{\underline{\mathbf{N 2 9 8}}}$ | Profit or Loss A/c | $\underline{\underline{198}}$ |
|  |  |  | $\underline{\underline{\underline{N 298}}}$ |


| Dr | Telephone Charges A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N'000 |  | N'000 |
|  |  | Drawings A/c | 80 |
| Bal. b/f | 680 | Profit or Loss A/c | 600 |
|  | N680 |  | +680 |


| Dr | Salaries and Wages A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \#'000 |  | \#'000 |
|  |  | Drawings A/c | 20,000 |
|  |  | Profit or Loss A/c | 39,250 |
| Bal. b/f | 59,600 | Bal. c/f (Note 2) | 350 |
|  | N59,600 |  | $\pm 59.600$ |
| Bal. b/f | N350 |  |  |


| Dr | Purchases A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N'000 |  | N'000 |
| Bal. b/f | 254,810 |  |  |
| Inventory A/c (Note 3) | 72,410 | Trading A/c | 327,220 |
|  | $\pm 327,220$ |  | N327,220 |


| Dr | Inventory (Opening) A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | +'000 |  | N'000 |
| Bal. b/f | 72,410 | Purchases A/c | 72,410 |
|  | N72,410 |  | N72,410 |


| Dr | Rent A/c |  | Cr |
| :--- | ---: | ---: | ---: |
|  | $\underline{N^{\prime} 000}$ |  | $\underline{N^{\prime} 000}$ |
| Bal. b/f | 8,200 |  |  |
| Bal. c/f | $\underline{\underline{500}}$ | Profit or Loss A/c | $\underline{8,700}$ |
|  |  | Bal. b/f | $\underline{\underline{N 8,700}}$ |
|  |  |  | $\underline{7500}$ |


| Dr | Allowance for Depreciation A/c (Motor Vehicles) |  | s) Cr |
| :---: | :---: | :---: | :---: |
| Bal. c/f | N’000 |  | N'000 |
|  | 1,300 | Profit or Loss A/c (Wk 2) | ) 1,300 |
|  | N1,300 |  | N1,300 |
|  |  | Bal. b/f | \#1,300 |
| Dr | Allowance for Depreciation A/c (Equipment) |  | Cr |
| Bal. c/f | N'000 | Profit or Loss A/c (Wk 3) | $\mathrm{N}^{\prime} 000$ |
|  | $\underline{2,600}$ |  | ) 2,600 |
|  | $\pm 2,600$ |  | N2,600 |
|  |  | Bal. b/f | \#2,600 |
| Dr | Allowance for Depreciation A/c (Furniture) |  | Cr |
| Bal. c/f | \#'000 | Profit or Loss A/c (Wk 4) | +'000 |
|  | 3,333 |  | ) 3,333 |
|  | N3,333 |  | N3,333 |
|  |  | Bal. b/f | N3,333 |

Workings:
(1) Motor vehicles not accounted for:

Car $¥ 4,500,000$
Truck $\quad \mathrm{N} 2,000,000$
N6,500,000
These omitted vehicles are part of the capital contributed by the owner of the business and so must be added to the capital account.
(2) $20 \% \times \mathrm{N} 6,500,000=\mathrm{N} 1,300,000$
(3) $20 \% \mathrm{x}(\$ 13,000,000- \pm 0)=\$ 2,600,000$, where $\# 0$ represents accumulated depreciation. Since there is no accumulated depreciation brought forward, the reducing balance at this time would produce an identical amount with straight line method.
(4) Sum of the years' digit $=\frac{n(n+1)}{2}$

Where $\mathrm{n}=$ useful life

$$
\begin{aligned}
& \frac{5(5+1)}{2} \\
& \frac{30}{2}=15
\end{aligned}
$$

Depreciation for year $1=\frac{5}{15} \times \neq 10,000,000=£ 3,333,333$
Approximately: $£ 3,333,000$

Notes:
(1) A sole proprietorship form of business is not income taxable by the tax authority because it is not a taxable person at law. Only the owner, Mr Okiemute, is liable to tax and so such tax should be treated as drawings when paid by the firm. However, if Mr Okiemute had registered his business as a company, the tax would have been treated as a business tax to the extent of the amount not related to the personal tax liability of Mr Okiemute. The simple reason why a company rather than a sole trader pays tax is that the former is regarded as a person at law.
(2) This is the prepaid salaries and wages which is a current asset rather than an expense for the year.
(3) There is actually no opening inventory as this is a new business. Instead, the transaction represents purchases.
(b)

## Life Begins At Sixty Ventures

Statement of Comprehensive Income for the year ended 30th June 2016

|  | N'000 $^{\prime} 000$ |
| :--- | :--- |
| Sales |  |
| '000 |  |
|  | 401,400 |

## Less: Cost of goods sold:

Opening inventory
Add: Purchases ..... 327,220
Less Returns ..... $(1,240)$
Net purchases ..... 325,980
Carriage inwards ..... 760
Cost of goods available for sale ..... 326,740
Less: Closing inventory ..... $(85,000)$
Cost of goods sold ..... $(241,740)$
157,550
Less: Expenses:
Carriage outwards ..... 2,850
Motor vehicle expenses ..... 1,000
Sundry expenses ..... 198
Telephone charges ..... 600
Salaries and wages ..... 39,250
Rent ..... 8,700
Depreciation: Motor vehicle ..... 1,300
Equipment ..... 2,600
Furniture ..... 3,333
Office expenses ..... 310
Insurance ..... 745
Net Profit ..... $\underline{\underline{96,664}}$$(60,886)$
(c)

## Life Begins At Sixty Ventures

Statement of Financial Position as at 30th June, 2016


## Long-term liabilities:

Long-term bank loan* 10,000
N133.569

Note: Alternatively, the long-term liabilities could be subtracted from the total assets less current liabilities (i.e. $\# 133,569-N 10,000$ ) to get a value of $\# 123,569$ for net assets.

### 4.0 CONCLUSION

.The preparation of the financial statements of sole proprietorships is usually more complex than many conventional textbooks present. Against this backdrop, this Unit adopted a case study scenario highlighting some real life decisions many small sole trader businesses grapple with especially in Nigeria.

### 5.0 SUMMARY

In this Unit, we have illustrated the preparation of statement of comprehensive income and statement of financial position of a more complex nature than those parts contained in Units 16 and 17. The illustration adopted a micro case study scenario to provide exemplars of some of the difficulties sole traders face in practice in their book-keeping process which ultimately affect their preparation of financial statements.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. The information for Ogidigan Enterprises for the year ending $31^{\text {st }}$ December 2015 is as follows

|  | N'000 $^{\prime}$ | $\mathbf{N}^{\prime} 000$ |
| :--- | :---: | :--- |
| Purchases and Sales | 85,010 | 139,835 |
| Carriage outwards | 2,850 |  |
|  |  | 196 |


| Carriage inwards | 805 |  |
| :---: | :---: | :---: |
| Capital |  | 68,000 |
| Drawings | 10,600 |  |
| Cash at bank | 18,720 |  |
| Cash in hand | 1,320 |  |
| Accounts receivable | 35,000 |  |
| Accounts payable |  | 16,300 |
| Long-term bank loan |  | 10,000 |
| Inventory (30 Dec. 2014) 14,210 |  |  |
| Land \& building | 34,800 |  |
| Equipment | 8,000 |  |
| Furniture \& fittings | 7,200 |  |
| Motor vehicles | 10,600 |  |
| Dep provision (1/1/2015): |  |  |
| - Building |  | 8,000 |
| - Equipment |  | 3,000 |
| - Motor vehicles |  | 4,000 |
| - Furniture \& fittings |  | 4,500 |
| Sundry expenses | 880 |  |
| Motor running expenses | 580 |  |
| Office expenses | 310 |  |
| Wages and salaries | 19,500 |  |
| Insurance | 540 |  |
| Telephone charges | 220 |  |
| Returns | $\underline{5,890}$ | 3,400 |
|  |  | 197 |

Additional information:
i. The book value of inventory as at 30 June 2016 amounted to $\$ 11,500,000$. However, the inventory has an estimated net realisable value of $¥ 10,850,000$.
ii. Drawings are made up of Cash of 9.2 million while the balance represents goods. .
iii. Salaries and wages outstanding $£ 500,000$
iv. Sundry expenses prepaid is $\not \equiv 1.2$ million
v. Depreciation is provided for as follows:
a. Building: straight-line basis for 20 years and this year marks the ninth anniversary of the building. (Hints: land and building is made of land $\# 14.8$ million
b. Equipment and furniture \& fittings are depreciated on reducing balance basis at the rate of $8 \%$. The equipment's residual value is $10 \%$ of the asset cost.
c. Motor vehicles are depreciated on equal instalment basis at the rate of $20 \%$ and the asset has a residual value of $£ 600,000$.

Required:
(a) Use journal to make the necessary adjusting entries.
(b) Prepare the statement of comprehensive income for the year ended $31^{\text {st }}$ December, 2015
(c) Prepare the statement of financial position as at 31st December, 2015

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

Thomas, A. \& Ward, A. M. (2012). Introduction to financial accounting, 7th edition, London: McGraw Hill Education

Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 19 <br> EXTENDED TRIAL BALANCE OF A SOLE PROPRIETORSHIP

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Composition of Extended Trial Balance
3.2 Original trial balance
3.3 Adjustments
3.4 Income statement
3.5 Financial position
3.6 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

This Unit focuses on a worksheet which combines in a snapshot the trial balance, adjustments, statement of comprehensive income and the statement of financial position.

### 2.0 OBJECTIVES

At the end of this Unit, the student should be able to carry out adjustment entries through the adjusted trial balance and know how to perform the mechanics of adding and subtracting within the extended trial balance.

### 3.0 MAIN CONTENT

### 3.1 Composition of Extended Trial Balance

An extended trial balance is basically a trial balance that extends to the right with other columns that account for end of year adjustments, the statement of comprehensive income as well as the statement of financial position. We shall use our example of Mummy is Good in Units 16 and 17 to illustrate how a worksheet or spread sheet could be used to capture all the components of an extended trial balance. Simply, the extended trial balance extends to the right other three major columns namely adjustments, statement of comprehensive income and statement of financial position, each having debit side and credit side, which bring the total of columns to eight.

Adjustments column: The adjustments column is used to make correction of errors detected after the extraction of the trial balance and other end of year adjustments (accruals, prepayments, allowances/provisions) which could otherwise be done through journal entries and ledger accounts. The adjustments column has debit and credit sides which are also used to perform the double entries of every account in need of adjustments. In a situation where a particular account in need of adjustment is not in the original or unadjusted trial balance, a new account is created for that transaction or item. For example, where there were no allowance for depreciation and bad debt accounts in the trial balance, these accounts will be created. The following are the treatment of adjustment entries in the adjustment column:
(i) Bad debts: Dr Bad debts and Cr Accounts receivable
(ii) Allowance for bad/doubtful debts: Dr Allowance for doubtful debts and Cr Allowance for doubtful debts
(iii)Allowance for depreciation: Dr Depreciation and Cr Allowance for depreciation
(iv) Accrued expense: Dr The particular expense and Cr Accrued expense
(v) Prepaid expense: Dr Prepaid expense and Cr The particular expense
(vi) Closing inventory: Dr Closing inventory and Cr Closing inventory
(vii) Income in advance: Dr The particular income/revenue and Cr Deferred income After the debit and credit entries for the adjusting items, the debit and credit sides of the adjustment column must balance.

Statement of comprehensive income column: The immediate column to the right of the adjustments column is that of the statement of comprehensive income, which also has debit and credit sides. All revenues go to the credit column while all revenue expenses and allocated capital expenses are debited. The student should be careful when taking figures to the income statement as the amounts of revenue expenditure and revenues in the original trial balance needing no adjustments are taken to the debit and credit sides respectively of the income statement whereas the ones that need adjustment must adjust for such changes. As we extend the trial balance to the income statement, we must note that debits and debits, credits and credits are added, whereas debits and credits are subtracted. This same principle is applicable to the statement of financial position. The balancing figure between the debit and credit sides represents either profit or loss. When the credit side is higher than the debit side (credit balance), the difference is a profit, while the reverse is a loss.

Statement of financial position column: The statement of financial position is the farthest extension right of the original trial balance and captures figures of assets, liabilities and equity from the trial balance and adjustments column. When matching items of the adjustments column with the trial balance column for the purpose of the financial position, you add debits (or credits) and debits (or credits) while you subtract debits and credits. For example, where there are opening allowance for depreciation and depreciation for the year, the former will be on the credit side of the trial balance while the latter will be on the credit side of the adjustments column. Because both are credits, they will be added and taken to the
credit side of the statement of financial position. If there is a bad debt written off after the trial balance has been extracted, the adjustments column will have bad debt debited and accounts receivable credited with the figure of bad debt written off. The credited bad debt will enable the accounts receivable in the financial position to be net of bad debt written off after the year end. But where there is a bad debt in the original trial balance and additional bad debt post-trial balance, the new bad debt will be on the credit side of the accounts receivable and debit side of the bad debt account. In this latter case, only the new bad debt will affect the financial position whereas the old and new bad debts (both being debits in trial balance and adjustments column) will be added and debited to the statement of comprehensive income. The same principle applies to other items of the financial position. As for the profit or loss figure, profit is inserted in the credit column and a loss in the debit column.

### 3.2 Illustrative Example

The following list of balances was extracted from the books of Mummy Is Good as at 31 December 2015:

|  | n | n |
| :--- | :---: | ---: |
| Purchases and sales | 150,000 | 272,000 |
| Inventory (1/1/2015) | 4,000 |  |
| Rent and rates | 4,500 |  |
| Motor running expenses | 3,000 |  |
| Salaries and wages | 54,000 |  |
| Insurance | 2,600 |  |
| Cash and bank | 13,000 |  |
| Accounts receivable and payable | 34,000 | 12,000 |
| Allowance for doubtful debts |  | 1000 |


| Sundry expenses | 500 |  |
| :---: | :---: | :---: |
| Buildings (at cost $\$ 100,000$ ) | 80,000 |  |
| Furniture (at cost $\ddagger 10,000$ ) | 6,800 |  |
| Motor vehicles (at cost $\ddagger 25,000$ ) | 19,600 |  |
| Drawings | 25,000 |  |
| Capital |  | 112,000 |
|  | \$397,000 | \$397,000 |

Additional information:
i. Inventory at the end of the year is $¥ 30,000$
ii. Rent owing at as 31 December 2015 amounted to $¥ 500$.
iii. Part of the wages and salaries is $\AA 1,800$ wages for offloading goods to warehouse.
iv. The following rates are to be applied on the non-current assets:
a. Building $5 \%$ on written down value
b. Motor vehicle $20 \%$ on cost
c. Furniture $20 \%$ on reducing balance
v. Sales included $\# 5,000$ for delivery to be made in June, 2016.
vi. Allowance for accounts receivable is to be adjusted to $2 \%$

Required:
Prepare an extended trial balance as at 31st December 2015.

## SOLUTION

| Account | Balance |  | Adjustments |  | Comprehensive Income |  | Financial Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dr (\#) | $\mathrm{Cr}(\#)$ | Dr(\#) | $\mathrm{Cr}( \pm)$ | $\mathrm{Dr}(\mathrm{\#})$ | $\mathrm{Cr}(\#)$ | Dr(\#) | $\mathrm{Cr}(\#)$ |
| Sales |  | 272,000 | 5,000 |  |  | 267,000 |  |  |
| Purchases | 150,000 |  |  |  | 150,000 |  |  |  |
| Opening inventory | 4,000 |  |  |  | 4,000 |  |  |  |
| Rent and rates | 4,500 |  | 500 |  | 5,000 |  |  |  |
| Motor running expenses | 3,000 |  |  |  | 3,000 |  |  |  |
| Salaries and wages | 54,000* |  |  |  | 54,000* |  |  |  |
| Insurance | 2,600 |  |  |  | 2,600 |  |  |  |
| Cash and bank | 13,000 |  |  |  |  |  | 13,000 |  |
| Accounts receivable | 34,000 |  |  |  |  |  | 34,000 |  |
| Accounts payable | 12,000 |  |  |  |  |  |  | 12,000 |
| Allow. for doubtful debts |  | 1,000 | 320 |  |  |  |  | 680 |
| Sundry expenses | 500 |  |  |  | 500 |  |  |  |
| Building | 100,000 |  |  |  |  |  | 100,000 |  |
| Prov. for dep: building |  | 20,000 |  | 4,000 |  |  |  | 24,000 |
| Furniture | 10,000 |  |  |  |  |  | 10,000 |  |
| Prov. for dep: furniture |  | 3,200 |  | 1,360 |  |  |  | 4,560 |
| Motor vehicles | 25,000 |  |  |  |  |  | 25,000 |  |
| Prov. for dep: MVs |  | 5,400 |  | 5,000 |  |  |  | 10,400 |
| Drawings | 25,000 |  |  |  |  |  | 25,000 |  |
| Capital |  | 112,000 |  |  |  |  |  | 112,000 |
| Closing inventory |  |  | 30,000 | 30,000 |  | 30,000 | 30,000 |  |
| Allow. for doubtful debts |  |  |  | 320 |  | 320 |  |  |
| Deferred income |  |  |  | 5,000 |  |  |  | 5,000 |
| Accrued rent and rates |  |  |  | 500 |  |  |  | 500 |
| Depreciation: Building |  |  | 4,000 |  | 4,000 |  |  |  |
| Depreciation: Furniture |  |  | 1,360 |  | 1,360 |  |  |  |
| Depreciation: MVs |  |  | 5,000 |  | 5,000 |  |  |  |
| Profit/loss |  |  |  |  | 67,860 |  |  | 67,860 |
| TOTAL | 397,000 | 397,000 | 46,180 | 46,180 | 297,320 | 297,320 | 237,000 | 237,000 |

As you may have observed, salaries and wages which was adjusted for wages of $¥ 1,800$ in Unit 15 in determining the cost of sales was not adjusted in the extended trial balance as this is not necessary because this worksheet only computes net profit or loss rather than gross profit. The separation of wages as a direct cost from salaries is only relevant when you want to determine gross profit, but gross profit determination is not part of extended trial balance.

### 4.0 CONCLUSION

We have looked at another way of presenting the financial statement in a spread sheet format involving the extension of the trial balance to include columns for adjustments, statement of comprehensive income and statement of financial position.

### 5.0 SUMMARY

This Unit highlighted the component parts of an extended trial balance and the mechanics of preparing this document.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What is an extended trial balance?
2. Identify the major columns of an extended trial balance
3. How would you treat end of year adjustments in the extended trial balance?

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014) Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

Thomas, A. \& Ward, A. M. (2012) Introduction to financial accounting, 7th edition, London: McGraw Hill Education

## UNIT 20

## BANK RECONCILIATION STATEMENT

## CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
3.1 Reconciling the Bank Statement and Cash Book
3.2 Bank Statement
3.3 Adjusted Cash Book
3.4 Bank Reconciliation Statement
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

It is a common practice for business entities to operate a business account at the bank for carrying out major business transactions and also maintain cash in hand for the purpose of meeting several other transactions that may not be too necessary to do through the bank for convenience and cost implications. For the purpose of cash transactions through banks and cash, the entity prepares a cashbook. In Introduction to Financial Accounting I, you have studied one- column, two- column and three-column cashbook. The last two accommodate both cash and bank column. All the transactions involving receipts and payments by cheques are done through the bank and they affect the bank columns of the cash book and the entity's record or account with the bank. Those transactions recorded by the bank are expected
naturally to correspond to those on the bank columns of the cash book. This is usually not the case and so it becomes necessary to periodically reconcile the transactions in the cash book domiciled in the entity with the record of transactions of the entity recorded by, and domiciled in, the bank, as part of organisational system of control.

### 2.0 OBJECTIVES

At the end of studying this Unit, the student should be able to explain what bank reconciliation statement means and be able to prepare it. The student should be able to identify the transactions that are likely to account for the difference between the bank balance in the bank statement and the bank balance in the cash book. Moreover, the student should be able to distinguish between the bank statement, regular cash book and the adjusted cash book and their uses.

### 3.0 MAIN CONTENT

### 3.1 Reconciling the Bank Statement and Cash Book

### 3.2 Bank Statement and Cash Book

A bank statement is a copy of the record showing the summary of transactions in an entity's or a customer's current account with the bank. The statement shows the records of all withdrawals from the account by cheques and any lodgement by cash and cheques into the account and the balances are shown every time a transaction occurs in the bank account. A lodgement into the bank account increases the balance whereas a withdrawal reduces the balance. Withdrawals are shown as debits while lodgements are shown as credits.

The cash book with respect to bank transactions records the bank transactions such as cash or cheques' lodgements by the entity and third parties and transfers into the bank account and payments by cheques and transfers to third parties as evidenced by the necessary source documents. All cheque payments and transfers to third parties and withdrawals for office use are credited to the bank column of the cash book. All the entity's receipts by cheque or bank
transfer are debited to the bank column of the cash book. The relationship between the cash book and the bank statement is that what is on the debit side of the bank statement mirrors what is on the credit side of the cash book, whereas what is on the credit side of the bank statement is on the debit side of the cash book. Based on this relationship, the closing balance in the bank statement should be equal to that of the cash book. However, experience shows that this is not usually the case. A number of factors that might account for this discrepancy are unpresented cheques, uncredited cheques, bank charges, errors (either emanating from the bank in the bank statement or from the entity in the cash book), standing order payments, direct debits, direct lodgements/transfers, dishonoured cheques.

Unpresented cheques: These are cheques the entity issued to a third party and have been credited to the cash book but not yet debited by the bank in the bank statement because the bearers have not presented them to the bank for payment. By implication, this will make the balance in the bank statement to be greater than the cash book balance.

Uncredited cheques: These are cheques that the entity received from third parties which it has debited to the cash book, which either have not been lodged with the bank or have been lodged with the bank but still pending clearing through the central clearing system. Until the cheques are cleared by the central clearing agency, the bank account of the entity cannot be credited. Logically, uncredited cheques make the balance in the cash book to be greater than that in the bank statement.

Bank charges: These are amounts charged by the bank for the services related to the entity's account with it. These charges include commission on turnover, account maintenance fee, charges for cheque books, transfer charges. In a situation where the entity is allowed to draw money above its balance in the bank (i.e., bank overdraft), the entity is usually charged a fixed amount of fee and interest for such services. All the above charges are only known by the entity after having access to the bank statement. Since the cash book would have been
closed before receipt of the bank statement, these charges are not contained in the cash book and this will apparently make the cash book balance to be greater than that of the bank statement.

Standing order payments: These are fixed and regular payments the entity authorises the bank to pay to third parties on its behalf. Examples of such payments include professional subscriptions, insurance policy, trade association dues, mortgage payment. Although the entity authorises these periodic payments, it can only record them in the cash book after receiving evidence from the bank that such payments have been made. The entity is notified of this transaction through bank statement or debit advice. Bank statement or debit advice is the basis of recording these transactions in the cash book. A debit advice is a document sent by the bank to the entity or customer notifying it of the charges or debits made to the entity's or customer's bank account. If the entity receives the debit advice before closing its cash book, these transactions would naturally be recorded and so would not cause difference between the cash book and bank statement balances. But the bank statement balance will be lower than the cash book balance if this amount has not been credited to the cash book.

Direct debits: These are amounts creditors or service providers are permitted to collect from the entity's bank account on a regular basis as bills for services they render to the entity. Unlike in standing orders in which the entity directly authorises the bank to pay fixed recurring payments in its behalf, the entity uses direct debits to authorise its service providers to collect money from its bank account on a regular basis. As these amounts are not usually fixed like in standing orders, the payment is not initiated by the bank but the collection is initiated by the entity's creditors because it is only the creditors that know how much to charge to that account from time to time. Like the standing orders, the entity receives evidence of these payments either through bank statement or debit advice.

Direct lodgements and transfers: Third parties are permitted to make cash/cheque deposits and wire transfers into a customer's or an entity's account. For example, dividends and interest income directly paid into the bank by the investee are part of direct lodgements or transfers. Until the bank is notified of these transactions through the bank statement or credit advice, they cannot be recorded in the cash book. A credit advice is a document sent by the bank to the entity or customer notifying it of the receipts or credits made to the entity's or customer's bank account. These credits will make the cash book balance to be logically less than the balance in the bank statement when they are not yet updated in the cash book.

Dishonoured cheques: Until third parties' cheques an entity deposited with its bank are cleared by the central clearing agency, they are not credited to the entity's account. Some of those cheques might fail scrutiny especially as a result of no sufficient fund (NSF) in the drawer's (issue of the cheque) account and so the entity's bank account cannot be credited with the amounts on those cheques. Cheques that are declined payments by the drawer's banker are considered as dishonoured cheques. By implication, the balance in the cash book will be greater than that in the bank statement since the cash book has already recorded the cheque monies as receipts debited to the bank column of the cash book.

Errors: Discrepancy might also arise between the cash book balance and the bank statement balance due to errors committed either by the preparer of the cash book or by the bank. Until such errors are corrected, the balances in the cash book and bank statement will not agree.

### 3.3 Adjusted Cash Book

Based on the factors we examined above that could result in discrepancy between the balances in the cash book and bank statement, the need to reconcile both balances would necessitate the updating of the cash book. In doing so, the items that are in the bank statement but not yet in the cash book would first of all be used to adjust the cash book. All those isolated transactions on the debit side of the bank statement are posted to the credit side of the
cash book (i.e., bank charges, standing order payments, direct debits, dishonoured cheques) while isolated transactions on the credit side of the bank statement are posted to the debit side of the cash book (i.e., direct lodgements/transfers). That is why this cash book is regarded as adjusted cash book as the new balance, if it is at the end of the financial year, would be the amount that will appear in the statement of financial position.

### 3.4 Bank reconciliation statement

This statement is prepared in order to agree the balance in the cash book with the balance in the bank statement. Usually, the bank reconciliation statement is done using two basic transactions namely, uncredited cheques and unpresented cheques. When this is done, the balance in the bank statement will agree with the reconciled balance when the reconciliation starts with balance as per adjusted cash book. If the reconciliation starts with the balance in the bank statement, the emerging balance must be equal to the balance in the adjusted cash book. However, when there is an error in the bank statement (i.e. an error committed by the bank, say, for wrongly charging the entity's account instead of another bank customer), the cash book balance will not still agree with the balance in the bank statement by performing the adjustments based on only unpresented and uncredited cheques. Thus, the error committed by the bank must be adjusted or reflected in the bank reconciliation statement. But if the error made is related to the cash book, this will be corrected in the adjusted cash book. Below is a proforma of bank reconciliation statement:

Bank Reconciliation Statement as at $31^{\text {st }}$ December 20x6

## N

Balance as per cash book xx
Add: Unpresented cheques $\underline{\mathrm{xx}}$

XX

Less: Uncredited cheques
(xx)
Alternative method of bank reconciliation statement Bank Reconciliation Statement as at $31^{\text {st }}$ December 20x6 N
Balance as per bank statement ..... xx
Add: Uncredited cheques ..... XX
xx
Less: Unpresented cheques ..... (x)
Balance as per cash book ..... $\underline{\underline{x x x}}$

### 3.5 Illustrative Examples

## Example 1

The cash book and bank statement of XYZ Consults revealed the following balances at the end of its financial year 31 December 2015: Cash book $\ddagger 96,800$ DR, Bank statement \#107,000 DR.

Further discoveries made were:
i. Unpresented cheques at the year-end amounted to $\$ 74,200$
ii. Uncredited cheques amounted to $¥ 258,000$
iii. A cheque payment to a creditor with a value of $\$ 55,100$ was recorded in the cash book as $\# 51,500$
iv. Standing order payment of $¥ 17,000$ for trade association subscription captured in the bank statement has not been recorded in the cash book.
v. A customer of the firm makes a direct payment to the bank through wire transfer for the sum of $£ 25,000$ and the credit advice was received before the cash book was
balanced. However, this amount was entered on the reversed side of the cash book.
vi. A supplier made a cheque payment directly into the bank account as a refund for excess billing and this amount is in the bank statement but not yet recorded in the cash book. The amount involved is $£ 8,500$.
vii. The following amounts in the bank statement are not yet recorded in the cash book: bank charges $¥ 35,600$ and overdraft interest $£ 22,300$.
viii. A third party cheque of $¥ 18,000$ lodged with the bank was dishonoured but this has not been reflected in the cash book.

## Required:

(i) Prepare the adjusted cash book of XYZ Consults
(ii) Draw up the bank reconciliation statement in respect of the above transactions.

## Example 2

The bank column in the cash book of Ezegede Bakery and its bank statement for the month of September 2016 is as follows:

| Dr | Cash Book |  | Cr |
| :--- | :---: | :--- | ---: |
|  | N |  | $\mathbf{N}$ |
| Bal. b/f | 1,200 | Ekiomado | 230 |
| Marilyn | 117 | Titilayo | 569 |
| Gabriel | 130 | Uhuru | 91 |
| Otasowie | 274 | Ekene | 72 |
| Makinwa | $\underline{632}$ | Bal. c/f | $\underline{1,391}$ |
|  | $\underline{\underline{12,353}}$ |  | $\underline{2,353}$ |

## Bank Statement

DR CR Balance
\# N

| Jan. 1 Balance b/f |  |  | $1,200 \mathrm{CR}$ |
| :--- | :---: | :---: | :---: |
| Jan. 5 Marilyn |  | 117 | $1,317 \mathrm{CR}$ |
| Jan. 6 Ekiomado | 230 |  | $1,087 \mathrm{CR}$ |
| Jan.12 Gabriel |  | 130 | $1,217 \mathrm{CR}$ |
| Jan. 14 Titilayo | 569 |  | 648 CR |
| Jan. 16 Uhuru | 91 |  | 557 CR |
| Jan. 20 Otasowie | 50 |  | 781 CR |
| Jan. 23 Bank charges | 45 |  | 736 CR |
| Jan. 26 Direct debit |  | 64 | 800 CR |
| Jan. 30 Dividend income | 50 |  | 750 CR |

The debit in respect of payment to Monique was an error relating to a transaction for Ezegede Woodwork.

Required:
(iii)Prepare the adjusted cash book of Ezegede Bakery
(iv) Draw up the bank reconciliation statement in respect of the above transactions.

## SOLUTIONS

## Solution to Example 1

(i)

XYZ Consults

| Dr | Adjusted Cash Book |  | Cr |
| :---: | :---: | :---: | :---: |
|  | $\pm$ |  | $\pm$ |
|  |  | Error (55,100-51,500) | 3,600 |
|  |  | Subscription | 17,000 |
| Bal. b/f | 96,800 | Bank charges | 35,600 |
| Bank transfer | 50,000* | O/D interest | 22,300 |
| Refund | 8,500 | Bal. c/f | 76,800 |
|  | \#155,300 |  | N155,300 |
| Bal. b/f | \#76,800** |  |  |

Note:

* It has to be doubled because the first $\$ 25,000$ cancels the error of the reversed entry while the second $\ddagger 25,000$ effects the correct entry.
** This represents the bank balance that will appear in the statement of financial position for the period.


## (ii)

XYZ Consults
Bank Reconciliation Statement as at 31st December 2015

|  | $\ldots$ |
| :--- | :---: |
| Balance as per adjusted cash book | 76,800 |
| Add: Unpresented cheques | $\underline{74,200}$ |
| Less: Uncredited cheques | $\underline{(258,000}$ |
| Balance as per bank statement | $\underline{(\nsubseteq 107,000)}$ or $£ 107,000 \mathrm{DR}$ |

Alternative method of bank reconciliation statement
XYZ Consults

Bank Reconciliation Statement as at 31st December 2015

|  | N |
| :--- | :--- |
| Balance as per bank statement | $(107,000)$ |
| Add: Uncredited cheques | $\underline{258,000}$ |
| Less: Unpresented cheques | 151,000 |
| Balance as per cashadjusted book | $\underline{(74,200)}$ |
| 776,800 |  |
| DR |  |

## Solution to Example 2

(i)

Ezegede Bakery

| Dr | Adjusted Cash Book |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bank charges | 50 |
| Bal. b/f | 1,391 | Direct credit or transfer | 45 |
| Dividend income | 64 | Bal. c/f | 1,360 |
|  | N1,455 |  | N1,455 |
| Bal. b/f | \#1,360 |  |  |

(ii)

Ezegede Bakery
Bank Reconciliation Statement as at 31st December 2015

## N

Balance as per cash book 1,360
Add: Unpresented cheque (Ekene) $\quad 72$
1,432
Less: Uncredited cheque (Makinwa)
Balance as per bank statement ..... N800 CR*

* This is the balance that should be in the bank after the error of $\pm 50$ debit is corrected.
Alternative method of bank reconciliation statement above
Bank reconciliation statement as at 31st December 2015
N ..... 750
Add: Uncredited cheque (Makinwa) ..... 632
Debit in error (Monique) ..... $\underline{50}$ ..... 1,432
Less: Unpresented cheque (Ekene) ..... 72
Balance as per cash book ..... 1,360 DR


### 4.0 CONCLUSION

For the purpose of placing control over bank transactions to prevent errors and fraud, the entity maintains a cash book which it periodically reconciles with the bank statement. When the adjusted cash book and the bank statement fails to agree after the reconciliation exercise, further investigation would be needed to ascertain the likely reason(s) for such discrepancy which might have arisen from error or fraud, or both. The agreement of the balances in the cash book and bank statement offers some reassurance on the accuracy of the bank balance that would be recognised in the statement of financial position.

### 5.0 SUMMARY

Bank reconciliation statement is necessary not only to prevent error or fraud but also to ensure that relevant transactions are completely captured. To achieve this, all transactions
already captured by the cash book are compared with those captured by the bank statement. Those transactions captured only by one of those books instead of both are agreed to ensure that no transaction is left unattended. After the necessary adjustments through the adjusted cash book, the bank reconciliation statement usually should agree in the absence of errors or fraud. Items that require adjustments or that make the cash book balance to differ from that of the bank statement have been highlighted and explained in this Unit.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by bank reconciliation statement?
2. Differentiate the original cash book from an adjusted cash book in the context of bank reconciliation statement.
3. Itemise and explain those factors that could make the balance in the cash book and bank statement to differ.
4. If you were given additional information to enable you prepare bank reconciliation statement, how would you determine the balance as per bank statement if you were given the balance of the unadjusted cash book without the bank statement balance?

### 7.0 REFERENCES/FURTHER READING

Gowthorpe, C. (2014). Business accounting and finance, 3rd edition, Australia: South Western Cengage Learning

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Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited

## UNIT 21

## CONTROL ACCOUNTS: SALES AND PURCHASES LEDGERS

### 1.0 Introduction

2.0 Objectives
3.0 Main Content
3.1 Control Accounts
3.2 Sales Ledger and the Adjusting Items
3.3 Purchases Ledger and the Adjusting Items
3.4 Reconciling the Control Accounts
3.5 Illustrative Examples
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Reading

### 1.0 INTRODUCTION

Entities put measures in place to ensure that their financial statements are free from errors. One of the accounting measures to ensure that errors are detected, at least for certain errors, is the trial balance extracted after all ledger accounts are balanced off at the end of the financial year. Relying on only the trial balance to detect a potential error or incidence of fraud may be very costly in the end. Consequently, business entities also provide some controls, especially for accounts relating to credit sales to customers and credit purchases from suppliers. Control accounts are used to summarise all the individual personal accounts of the trade debtors and trade creditors. We shall be looking at sales ledger (accounts receivable) control account and
purchases ledger (accounts payable) control account as a means of testing the accuracy of the individual personal accounts that are added up to ascertain the control accounts.

### 2.0 OBJECTIVES

After studying this Unit, the student should be able to explain what sales ledger and purchases ledgers are. The student should be able to distinguish sales account from sales ledger and purchases account from purchases ledger. It is also expected that the student should be able to know the elements or items that make up the sales ledger and purchases ledger and be able to draw up these control accounts from a mass of available data.

### 3.0 MAIN CONTENT

### 3.1 Control Accounts

Control accounts are general ledger accounts that provide a summary of a large number of transactions. Control accounts are sometimes also referred to as total accounts because they use the aggregates of the items in the individual accounts that make them up. That is why control account is also commonly referred to as a memorandum account. By memorandum account it means that the double entry rules are not followed in this account in relation to the individual accounts from which the items debited or credited to it are aggregated from. It thus means that the items debited or credited to the individual accounts from which the control account derives will retain their debit or credit positions in the control accounts. Consequently, the balance in the control account must be equal to the total of all the individual balances in the ledger.

Control accounts are usually maintained in a manual or mechanical accounting system rather than in a computerised or electronic accounting system. Some important advantages of control accounts are:
i. Quick detection and correction of errors by acting as a semi-trial balance for accounts receivable and accounts payable.
ii. As it allows only the totals of all items relating to receivables and payables to be entered into it, it facilitates the extraction of the trial balance as it enables the total rather than the individual balances in the personal receivables and payables accounts to be used.
iii. It is also a useful instrument of fraud prevention and control.
iv. It allows the total owed by all customers or owed to suppliers to be known at a glance and so serves as a useful data for management planning and control of credit policies.

### 3.2 Sales Ledger and the Adjusting Items

Sales ledger control account shows the total amounts customers owed an entity at a particular date. Put differently, it is the total of accounts receivables and this aggregated item is part of current assets that will appear in the statement of financial position. Students should know that sales ledger is simply accounts receivable and not the same thing as sales account which is otherwise an account to which both credit and cash sales are posted. Whereas sales ledger is a personal account, sales account is a nominal account. Items that are treated in the sales ledger control account are: sales ledger opening balances, credit sales for the period, returns inwards, cash and cheque received from customers (excluding cash sales), bad debt written off (this does not include allowance for doubtful debts and bad debt written off earlier but now recovered as this should be strictly treated as income in the profit or loss), discount allowed, dishonoured cheque, interest on overdue debt, contra (that is, when a customer is also a supplier such that what he owes is agreed to be set-off against what he is owed), and closing account balances. Below is a proforma sales ledger control account.

| Dr Sales Ledger Control A/c |  |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \# |  | \# |
|  |  | Bal. b/f (if any) | xx |
| Bal. b/f | xx | Bad debts written off | xX |
| Credit sales | xx | Cash/cheque received from |  |
| Cash refund | xx | customers | xx |
| Dishonoured cheque | xx | Discounts allowed | xx |
| Interest on overdue |  | Contra [set-off] | xx |
| $\xrightarrow[\text { debt }]{\text { Bal. c/f (if any) }}$ | XX <br> x | Returns inwards Bal. c/f | xx <br> xx |
| Bal. c/f (if any) | $\underline{\underline{x x x}}$ |  | $\underline{\underline{x x x}}$ |

### 3.3 Purchases Ledger and the Adjusting Items

Purchases ledger control account shows the total amounts the entity owed its suppliers at a particular date. Put differently, it is the total of accounts payables and this aggregated item is part of current liabilities that will appear in the statement of financial position. Students should know that purchases ledger is simply accounts payable and not the same thing as purchases account which is otherwise an account to which both credit and cash purchases are posted. Items that are treated in the purchases ledger control account are: purchases ledger opening balances, credit purchases for the period, returns outwards, cash and cheque paid to suppliers (excluding cash purchases), discount received, contra (that is, when a customer is also a supplier such that what he owes is agreed to be set-off against what he is owed), and closing account balances.

| Dr | Purchases Ledger Control A/c | Cr |  |
| :--- | :---: | :--- | :---: |
|  | y |  |  |
| Bal. b/f (if any) | xx |  |  |
| Returns outwards | xx |  |  |
| Discount received | xx | Bal. b/f | xx |
| Cash/cheque paid | xx | Credit purchase | xx |
| Contra [set-off] | $\underline{\mathrm{xx}}$ | Cash refund | $\underline{\mathrm{xx}}$ |
|  | $\underline{\underline{x x x}}$ |  | $\underline{\underline{x x x}}$ |

### 3.4 Reconciling the Control Accounts

The balance in the sales ledger control account (total accounts receivable) should be equal to the sum of the balances in the individual accounts of the customers in the sales ledger; this is equally applicable in the context of the purchases ledger. If there is a difference, it shows that an error has occurred in the process either in the course of summarising the control account or with respect to the individual accounts that make up the control account. Consequently, effort has to be made to detect and correct the likely error. This is what makes control account operates like a trial balance. We studied in Unit 2 that when errors that affect the trial balance are detected they are corrected through suspense account. In much the same way, any errors making the sum of the individual balances not to be equal to that of the control account have to be corrected and both ledgers reconciled. In carrying out the reconciliation, say, for sales ledger control account:

Original sales ledger control account balance xx
Add: Invoices omitted from control a/c but entered in sales ledger
Customer balance omitted from sales ledger control due to its erroneous inclusion in the purchases ledger

XX
Credit purchases posted in error to the credit side of sales ledger instead of the credit of an account in the purchases ledger

Undercasting error in calculating end of year receivables' balances

Less: Supplier account with a debit balance included in the sales ledger that should have been included in the purchases ledger

Return outwards posted in error to the debit of the sales ledger account instead of the debit of an account in the purchases ledger (xx)
Understatement of returns inwards ..... (xx)
Revised sales ledger control account balance ..... $\underline{\underline{x x x}}$

### 3.5 Illustrative Examples

## Example 1

The following were obtained from the books of Alonge\& Sons Nig. for half-year 2016:
N
Sales ledger balances, 1 January 2016: - Debit ..... 20,040

- Credit ..... 56
Purchases ledger balances, 1 January 2016: - Debit ..... 12
- Credit ..... 14,860
Activities during the half-year to 30 June 2016:
Payments to trade accounts payable ..... 93,685
Cheque from credit customers ..... 119,930
Total purchases (credit purchases $\# 95,580$ ) ..... 186,000
Total sales (credit sales $¥ 124,600$ ) ..... 350,070
Bad debts written off ..... 204
Discounts allowed ..... 3,480
Discounts received ..... 2,850
Returns inwards ..... 1,063
Returns outwards ..... 240
Sales ledger credit balances at 30 June 2016 ..... 37
Purchases ledger credit balances at 30 June 2016 ..... 26
Provision for bad debts ..... 230
Cash refund to credit sales customers ..... 5,120
Cash refund cash sales customers ..... 1,240
Cash refund from credit suppliers ..... 850
Cash refund from cash purchases suppliers ..... 910
Balances in the sales ledger set off against purchases ledger ..... 438
Dishonoured cheque ..... 2,300
Required:Prepare the sales ledger control account and purchases ledger control account for the half-year to June 2016.


## Example 2

Obata Merchants Nigeria has numerous credit customers which necessitates the use of individual accounts in sales ledger and sales ledger control account. At the end of the year, the total of all the individual accounts in the sales ledger amounts to $¥ 12,380$ and the sales ledger control account has a balance of $\$ 12,550$. Upon investigation, the accountant discovered the following errors:
i. Sales amounting to $¥ 850$ was omitted from the control account
ii. A sales ledger account balance of $¥ 800$ was not included in the list of balances
iii. A cash of $\$ 750$ received from a credit customer was entered in the personal account as $¥ 570$
iv. Discounts allowed not yet entered in the control account is $¥ 100$
v. There was an undercast of $\ddagger 200$ on a customer's personal account.
vi. A purchase ledger contra item of $£ 400$ was not yet entered in the control account.
vii. A bad debt figure of $\pm 500$ was not yet entered in the personal account or control account
viii. A cash receipt of N 250 from a credit customer was debited to a personal account.
ix. Return inwards omitted from the control account amounted to N 200
x. The bank dishonoured a cheque of $¥ 300$ received from a credit customer and the necessary adjustment is yet to be made.

Required:
(a) Prepare a corrected Sales Ledger Control Account
(b) Prepare a statement to reconcile the list of personal account balances with the corrected sales ledger control balance.

## SOLUTION

## Solution to Example 1

| Dr | Sales Ledger Control A/c |  | Cr |
| :---: | :---: | :---: | :---: |
| Dr | N |  | N |
|  |  | Bal. b/f | 56 |
|  |  | Bank | 119,930 |
| Bal. b/f | 20,040 | Bad debts written off | 204 |
| Credit sales | 124,600 | Discounts allowed | 3,480 |
| Cash refund | 5,120 | Contra [set-off] | 438 |
| Dishonoured cheque | 2,300 | Returns inwards | 1,063 |
| Bal. c/f | 37 | Bal. c/f | 26,926 |
|  | \#152,097 |  | \#152,097 |
| Bal. b/f | \#26,926 | Bal. b/f | \#37 |


| Dr | Purchases Ledger Control A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | \# |  | N |
| Bal. b/f | 12 |  |  |
| Returns outwards | 240 |  |  |
| Discount received | 2,850 | Bal. b/f | 14,860 |
| Cash/Bank | 93,685 | Credit purchase | 95,580 |
| Contra [set-off] | 438 | Cash refund | 850 |
| Bal. c/f | 14,091 | Bal. c/f | 26 |
|  | N111.316 |  | \#111.316 |
| Bal. b/f | \#26 | Bal. b/f | \#14,091 |

Note: Do not forget that cash sales and purchases are not relevant here as the items relating to credit sales and purchases are of concern. Since cash sales and purchases are ignored, any related refunds of cash to the related customers or suppliers are also to be ignored. For
example, if you are not specifically given the amount received from credit customers, you can still determine this if you are given the total cash received from sales customers by deducting the amount of cash sales given from this figure. However, you cannot compute such figure unless you know the amount of cash sales. Watch out for some of these tricks. Another grey area is allowance for bad/doubtful debts, which must be ignored. Still another is bad debt recovered after already written off in previous period(s).

## Solution to Example 2

(a)

| Dr | Sales Ledger Control A/c |  | Cr |
| :---: | :---: | :---: | :---: |
|  | N |  | N |
|  |  | Bad debts written off | 500 |
|  |  | Discounts allowed | 100 |
| Bal. b/f | 12,550 | Contra [set-off] | 400 |
| Omitted sales | 850 | Returns inwards | 200 |
| Dishonoured cheque | - $\quad 300$ | Bal. c/f | 12,500 |
|  | \#13,700 |  | N13,700 |
| Bal. b/f | \# 12,500 |  |  |

(b)
Reconciliation of personal accounts balances with sales ledger control account
N
Personal accounts balances in the sales ledger
12,380
Add: Omitted sales ..... 800
Undercast ..... 200
Dishonoured cheque ..... 300
1,300
13,680
Less: Deficit receipt due to transposition error ..... 180
Bad debts ..... 500
Cash receipt reversed by error* ..... $\underline{500}$

Revised balance in the list of personal account balances $¥ \underline{\underline{12,500}}$
*Remember that when error of complete reversal is committed the correction will take a double of the amount in error (see Unit 3, if this still appears confusion to you).

### 4.0 CONCLUSION

Control accounts are memoranda accounts which means they primarily do not follow the double entry rule per se but the list of accounts in the personal ledgers to which the relate follow such rules. Sales ledger and purchase ledger control accounts are mini trial balances and control measures which make for quick detection and correction of errors relating to the recording process involving credit sales and credit purchases. As a control measure, it apparently reduces or prevents the incidence of fraud.

### 5.0 SUMMARY

We have discussed control accounts in the context of trade accounts receivables and payables. Control accounts namely, sales ledger control account (or trade accounts receivable control account) and purchases ledger control account (or trade accounts payable control account) are memoranda accounts and are accounts of the totals in the list of balances in the individual accounts of trade debtors and trade creditors. The balance in the control account is usually compared with the total of balances from the individual personal accounts. If there are differences, they are adjusted and necessary reconciliation made between them.

### 6.0 TUTOR-MARKED ASSIGNMENT

1. Distinguish between the individual accounts in the sales ledger and the sales ledger control account
2. Identify some of the likely advantages of control accounts
3. Prepare sales ledger control account and purchases ledger control account from the following data extracted from the books of Omimi-Ejoor:
N
Sales (including cash sales $\# 268$,187) ..... 613,077
Purchases (including cash purchases $¥ 14,440$ ) ..... 511,040
Total receipts from customers ..... 600,570
Total payments to suppliers ..... 503,970
Discounts allowed ..... 5,520
Discounts received ..... 3,510
Refunds given to cash customers ..... 4,500
Balances in the sales ledger set off against purchases ledger ..... 70
Bad debts written off ..... 780
Increase in the allowance for doubtful debts ..... 850
Returns inwards ..... 4,140
Returns outwards ..... 1,480
Opening sales ledger balance ..... 26,555
Opening purchases ledger balance ..... 43,450

### 7.0 REFERENCES/FURTHER READING

Hindmarch, A. and Simpson, M. (1991). Financial Accounting: an introduction, London: Macmillan

Hodge, R. (2008). Accounting: A foundation, London: Cengage Learning
Wood, F. \& Sangster, A. (2012). Frank Wood's business accounting 1, Harlow, England: Pearson Education Limited


[^0]:    * You will note that we started the narration with 'being' or 'to'. It does not necessarily matter which one you use. Moreover, you might even wish to ignore both without any fundamental breach of rule provided the narration captures the event to which it relates.

[^1]:    * Trade-in value of the old machine is $¥ 15,000$ ( $\$ 200,000-\$ 185,000$ ) resulting in a loss on exchange of $¥ 25,000$ as the book value of the asset is less than the trade-in value (market value) of N15,000.

[^2]:    * Trade-in value of the old machine is $\$ 50,000(\$ 200,000-\AA 150,000)$ resulting in a gain on exchange of $\$ 10,000$ as the book value of the asset is less than the trade-in value (market value) of $\mathrm{N} 50,000$. Because the two assets are similar, the gain on exchange is not recognised in the period but is used to reduce the purchase cost of the new machine as shown in the journal entries below:

