NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF BUSINESS AND HUMAN RESOURCE

COURSE CODE:BHM107

COURSE TITLE: GENERAL ACCOUNTING II

COURSE GUIDE

BHM107

GENERAL ACCOUNTING II

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Introduction

The course, General Accounting II (BHM107) is a core course which carries two credit units. It is prepared and made available to the 100 level students of the School of Business and Human Resource Management. The course is a useful material to the students in their academic pursuit as well as in their workplace as business and human resource managers.

What You will Learn in this Course

The course is made up of fifteen units, covering areas that have not treated in General Accounting I. The concepts of Accruals and Prepayments were introduced, highlighting issues bordering on Prepaid Expenses, Accrued Expenses, Income in Advance and Income Due. Also introduced are the concepts of Provisions for Bad & Doubtful Debts, Drawings and treatments of stock. Students would also learn about methods of providing for depreciation and accounting for depreciation, including its causes and how to record it.

The technical aspects of accounting for fixed assets, including freehold and leasehold fixed assets were discussed; how to prepare final accounts from incomplete records; the concept of partnership and its final accounts preparation; accounting for changes in partnership business; manufacturing accounts; stock valuation methods, including the provisions made in Statement of Accounting Standard (SAS)4; branch accounting system; departmental accounting system; accounting for hire-purchase transactions and installmental payments; accounting for various dimensions of business combination; and financial ratios analysis were all extensively discussed with adequate illustrative examples to simply things for the understanding of the readers

This Course Guide is meant to provide you with the necessary information about the course, the nature of the materials you will be using and how to make the best use of the materials towards ensuring adequate success in your programme as well as appreciating the sensitivity of records keeping and accounting in whatever you do in life. Also included in this course guide are information on how to make use of your time and information on how to tackle the Tutor-Marked Assignment (TMA) questions.

There will be tutorial sessions during which your instructional facilitator will take you through your difficult areas in the Course, and at same time you are expected to have meaningful interactions with your fellow learners.

Course Aims

The main aim of this Course is to develop and sustain your increasing interest in accounting to the extent that you might wish to further your study in the discipline to the highest level possible. The Course also aims at making you have greater appreciation of the role of accounting in ensuring success in business and human resource management in both the private and public sector organizations.

Course Objectives

After completing this Course, you should be able to accomplish the aims mentioned above, which would be possible by achieving the following objectives:

1. Treating Prepaid and accrued expenses
2. Treating Income received in advance and Income due to accrue
3. Appreciating the type of debtors a business may have in its accounts.
4. Adjusting for bad and doubtful debtors in the books of accounts.
5. Adjusting for drawings made by a business proprietor.
6. Treating for stock value in the final accounts.
7. Appreciating various methods of providing for depreciation.
8. Understanding how to compute depreciation on an asset acquired during the year.
9. Maintaining accounting records for depreciation
10. Explaining causes of depreciation
11. Computing depreciation for different categories of fixed assets
12. Maintaining accounting records for depreciation
13. Appreciating the concept of fixed assets
14. Understanding ways of accounting for fixed assets
15. Differentiating between leased and owned fixed assets
16. Appreciating the need to provide for fixed assets depreciation
17. Defining incomplete records and appreciate their disadvantages

18. Understanding the indication of incomplete records
19. Determining profit of a business from incomplete sets of records
20. Preparing final accounts from sets of incomplete records
21. Appreciating types of partners and partnership
22. Understanding the likely contents of the partnership deeds
23. Appreciating the liabilities that attributable to partners in a partnership business
24. Understanding the advantages of partnership over sole proprietorship business
25. Learning about the types of accounts to be kept by a partnership business.
26. Appreciating the accounting treatment on admission of a new partner.
27. Understanding the accounting treatment on the retirement or death of a partner.
28. Appreciating reasons why a partnership could be dissolved and the accounting treatment.
29. Appreciating the logic in the Gerner Vs Murray decided court case
30. Understanding the business setting in which the preparation of manufacturing account is required.
31. Understanding the differences between a manufacturing account and a trading, profit and loss account.
32. Explaining the key terminologies used in a manufacturing account.
33. Describing the principal adjustments normally being made to a manufacturing account.
34. Defining Stock and explaining reasons why stock must be kept
35. Knowing the several methods for valuing stock
36. Knowing the recommended methods for valuing stock as described in SAS 4
37. Preparing store ledger card using FIFO, LIFO and Average Method

38. Knowing the disclosure requirements on stock as stated in SAS 4
39. Appreciating the meaning of branch account
40. Explaining the pricing method involving local branches
41. Appreciating instances where head office keeps the accounts and where the branches keep separate accounts
42. Understanding the accounting treatment of transactions involving local branch
43. Appreciating what Departmental account is and its aim
44. Explaining the advantages of using departmental accounts
45. Observing the principles of departmental account
46. Preparing departmental accounts for incorporation into the final accounts
47. Understanding what hire purchase is all about
48. Appreciating the difference between hire purchase and credit sales
49. Observing the accounting treatment with respect to hire purchase transactions
50. Knowing how to treat installment payments
51. Appreciating the meaning of business combination.
52. Understanding reason(s) why businesses combine to produce a stronger entity.
53. Explaining the major types of business combination.
54. Appreciating the accounting entries for business combination.
55. Appreciating the concept of ratio.
56. Understanding how to conduct financial analysis, using accounting ratios.
57. Testing the efficiency and effectiveness of business enterprises

Working through this Course

The Course consists of the accounting and finance issues that have been highlighted in the set objectives above. More General Accounting aspects are adequately introduced to encourage business and human resource management students to develop sustained interest in accounting.

Course Materials

Major components of the Course are:

(i) Course Guide

(ii) Study Units

(iii) Textbooks and Other Reading Materials

(iv) Assignment Guide

Study Units

There are fifteen units in this course, which should be studied carefully.

They are as follows:

Module 1

Unit 1 Accrual and Prepayments

Unit 2 Provision for Bad and Doubtful Debts

Unit 3 Methods of Providing for Depreciation

Unit 4 Accounting for Depreciation

Unit 5 Accounting for Fixed Assets

Module 2

Module 3

The first unit presents Accruals and Prepayments, including Prepaid Expenses, Accrued Expenses, and Income in Advance and Income Due. These issues are adequately discussed for the student to appreciate their importance in accounting. In the second unit, Provisions for Bad & Doubtful Debts are the subjects of discussion, where the accounting treatments of Bad Debts, Doubtful debts and methods of Provisions for them were discussed. Also discussed are the accounting treatments of Drawing and Stock.

The third unit presents Depreciation Methods, emphasizing on Definition of Depreciation and Methods of Computing Depreciation like: Fixed Installment Method; Diminishing Balance Method; Sum of the Years' Digits Method; and Inventory System of Depreciation. There is also a discussion on treatment of Depreciation on Assets Acquired during the Year. The fourth unit treats the area of Depreciation Adjustments, Causes of Depreciation, Methods of Recording Depreciation, and Disposal of an Asset

The fifth unit is used to discuss the aspects of Accounting for Fixed Assets, emphasizing on the Relevant Concepts Surrounding Fixed Asset, Valuation of Fixed

Assets, Depreciation Policy of Fixed Assets, Methods of Recognizing Fixed Assets and Liabilities, Sale and Repurchase Agreement, Finance Lease Arrangement, Cost of Self– Constructed Fixed Asset, and Components of Fixed Asset Cost. The sixth unit is about Preparation of Final accounts using Incomplete Records, including discussions on: Meaning of Incomplete Records, Indication of Incomplete Records, and Determination of Profit and other Items of Final Accounts.

The seventh unit discusses the Concept of Partnership Final Accounts, including discussion on: Kinds of Partners, Partnership Deeds/Articles of Association, Liability of Partners, Advantages of Partnership, Types of Partnership, and Partnership Accounts. The eighth unit is about Changes in Partnership, where issues bordering on Admission of New Partner, .Retirement or Death of a Partner, Dissolution of Partnership, and Gerner Vs Murray Decided Case were discussed.

The ninth unit presents analysis on Manufacturing Accounts, including Inventories of a Manufacturing Concern, Types of Costs Relevant in the Manufacturing Accounts, and why is Cost Information Needed? The tenth unit is used to discuss Stock Valuation Methods, including discussion on Types of Stock Taking, Valuation Methods, and SAS 4 Disclosure Requirements.

The eleventh unit presents discussions on Branch Accounting System, emphasizing on: Divisions of Branch Accounting, Where the Head Office Keeps the Accounts, Pricing Method, Accounting Entries, Double Column Method or Memorandum Method, Branch Adjustment Accounting Method, and issues pertaining to Where the Branches Keeps Separate Accounts. The twelfth unit is about Departmental Accounting System, highlighting The Concept of Departmental Accounting, Advantages of Departmental Accounts, and the Principles of Departmental Accounting.

The thirteenth unit discusses Accounting for Hire-Purchase Transactions, including The Concept of Hire-Purchase and Payments under the Arrangement, Accounting Treatments, and Journal Entries for Hire-Purchase Transactions, Entries in the Book of the Hire Purchaser, and Entries in the Books of the Vendor. The fourteenth unit is about Accounting for Business Combination, emphasizing on the accounting treatments of Amalgamation, Closing the Books of the Discontinuing Companies, Specific Accounts Needed, Sundry members account (ordinary and preference), Purchase Consideration, Establishment of the New Company and Accounting Entries, The Balance Sheet of the New Company, Absorption, Takeover or Purchase of Business, and Accounting Entries in the Books of Absorbing or Continuing Business.

The last unit (Unit 15) is about Introduction to Financial Ratio Analysis, highlighting The Concept of Ratio, Comparative Analysis Using Ratios, Users of Accounting

Information and Their Interests, and Types of Ratios and Their Formulae (including Overall Performance Ratios, Profitability Ratios, Productivity Ratios, Liquidity Ratios, Capital Structure Ratios, and Investment Ratios).

Assignments File

There are many self-assessment exercises and many tutor marked assignments in this Course and you are expected to attempt all of them by following the schedule prescribed for them, by your tutor, in terms of when to attempt them and submit same for grading.

Tutor-Marked Assignments

In doing the tutor-marked assignments, you are to apply your residual knowledge and what you have learnt in the contents of the study units. These assignments which are many in number are expected to be turned in to your Tutor for grading. They constitute 30% of the total score for the Course.

Final Examination and Grading

At the end of the Course, you will write the final examination. It will attract the remaining 70%. This makes the total final score to be 100%.

Conclusion

The Course, General Accounting II for students of Business and Human Resource Management (BHM112) exposes you to the general aspects of accounting, including treatment of miscellaneous accounting issues. The specialized issues on manufacturing accounts, branch accounts, departmental accounts, accounting for fixed assets, stock valuation methods, etc are fairly introduced. Also introduced is the important accounting and finance topic of ratios analysis and interpretation for various decisions making purposes. On successful completion of the Course, you would be empowered with the necessary knowledge for efficient and effective functioning as an accountant with any private and public sector organization.

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MODULE 1

UNIT 1 ACCRUALS AND PREPAYMENTS

CONTENTS

1.0 INTRODUCTION

There are transactions which take place after the books of accounts have been closed and trial balance prepared. In order to give the actual results of the year's operations and to ensure that the balance sheet gives a true and fair view of the financial position, these transactions need to be adjustably incorporated into the final accounts for them to give a correct picture of the financial position of the reporting entity, as at the period ended. This Unit shall discuss these adjustments to be made, why and how.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

prepaid and accrued expenses
income received in advance and Income due to accrue
other relevant issues.

3.0 MAN CONTENT

3.1 Accruals and Prepayments

3.2 Expenses

These are amounts incurred for the purpose of earning an income. Expenses are written off to the income statement in line with the principles of cause and effect. However, there are times when such expenses are either not paid in full or the amount paid for exceeds the current accounting period of the receiving business. These instances are discussed below:

3.2.1 Prepaid Expenses

These are payments made in respect of a period beyond the date of account. It is in the nature of an asset; that is, the benefit of the expenditure is still to be derived. The portion which relates to the current period is transferred to the profit and loss and the balance which relates to the future period is shown under the current asset in the balance sheet.

3.2.2 Accrued Expenses

This occurs where an expense has been incurred but not brought into the account as a result of it not being paid for. The amount of expenses shown in the ledger must be increased to allow for the expenses due but not yet entered. The accrued expenses are shown in the balance sheet under current liabilities at the end of the period.

SELF ASSESSMENT EXERCISE 1

1. Why is prepaid expense an asset item?
2. How is an accrued expense treated in the balance sheet?

3.3 Incomes

These are proceeds realized from transacting business. Incomes are the primary aim of being in business without which survival becomes difficult. Some incomes are often received in advance such as rental income while some are paid after being due. The adjustments required in either of the scenario mentioned are discussed below:

3.3.1 Income in Advance

This is where sums have been received during a period in respect of future services. Only part of such sums which relates to the current period is transferred to the profit and loss account as earned income, while the portion relating to future period is shown in the balance sheet under current liabilities.

3.3.2 Income Due

These are incomes which are due but not yet received at the trial balance date. The amount of income shown in the ledger must be increased to allow for income due but not yet entered. The income accrued is shown in the balance sheet under current asset at the end of the period.

SELF ASSESSMENT EXERCISE 2

1. Why is income the primary aim of being in business?
2. Differentiate between income due and income in advance.

3.4 Illustrative Example

Madam Titilayo is a trader whose financial year ends on 31st December. For the financial year 2004, the following information was obtained from her records:

a) ***Motor Expenses***: Paid in the year to 31st December, 2004 ₦4, 275. Owing as at 31st Dec.2003 ₦162; owing as at 31st December, 2004, ₦338.
b) ***Insurance***: Paid in 2004 ₦3, 360. Prepaid at 31st December, 2003, ₦200; prepaid at 31st December, 2004 ₦280.
c) ***Rent and Rates***: Paid in the year, ₦5, 835; Rent owing at 31st December, 2003 ₦240; Rent paid in advance at 31st December, 2004 ₦375; Rates paid in advance 31st December, 2003; ₦308; Rates owing at 31st December, 2004 ₦540.
d) ***Commission Received***: Received for the year to 31st December, 2004 ₦1,275; owing at 31st December, 2003 ₦120; owing at 31st December 2004, ₦218.
e) Titilayo sublets parts of the premises. Receives ₦4, 400 during the year ended to 31st December, 2004. Tenants had paid in advance at 31st December, 2003, ₦1,400 and on 31st December, 2004, ₦1,680.

Required:

i) Prepare all the necessary ledger accounts to reflect the various adjustments above and amount taken to profit and loss account;
ii) Show an extract of the profit and loss account for the year ended 31st December, 2004.

iii) Show the balance sheet extract as at 31st December, 2004.

SOLUTION

Motor Expenses Account

2004		₦	2004		₦
Dec. 31	Cash	4,275	Jan. 1	Bal. b/d	162
Dec. 31	Bal. c/d	338	Dec.31	Profit & Loss	4,451
		4,613			4,613
2005			2005		
			Jan. 1	Bal. b/d	338

Insurance Account

2004		₦	2004		₦
Jan. 1	Bal. b/d	200	Dec. 31	Profit & Loss	3,280
Dec. 31	Cash	3,360	Dec. 31	Bal. c/d	280
		3,560			3,560
2005			2005		
Jan. 1	Bal. b/d	280			

Rent and Rates Account

2004		₦	2004		₦
Jan. 1	Bal. b/d	375	Jan. 1	Bal. b/d	240
Dec. 31	Cash	5,835	Dec. 31	Profit & Loss	6,202
Dec. 31	Bal. c/d	540	Dec. 31	Bal. c/d	308
		6,750			6,750
2005			2005		
Jan. 1	Bal. b/d	308	Jan. 1	Bal. b/d	540

Commission Received Account

2004		₦	2004		₦
Jan. 1	Bal. b/d	120	Dec. 31	Cash	1,275
Dec. 31	Profit & Loss	1,373	Dec. 31	Bal. c/d	218
		1,493			1,493
2005			2005		
Jan. 1	Bal. b/d	218			

Rent Received Account

2004		₦	2004		₦
Dec. 31	Profit & Loss	4,120	Jan. 1	Bal. b/d	1,400
Dec. 31	Bal. c/d	1,680	Dec. 31	Cash	4,400
		5,800			5,800
2005			2005		
			Jan. 1	Bal. b/d	1,680

Profit and Loss Account Extract

2004		₦	2004		₦
Dec. 31	Motor Expenses	4,451	Dec. 31	Commission Received	1,373
Dec. 31	Insurance	3,280	Dec. 31	Rent Received	4,120
Dec. 31	Rent & Rates	6,202			

Balance Sheet Extract As at 31 December 2004

Current Liabilities	₦	Current Assets:	₦
Motor Expenses Owed	338	Insurance Prepaid	280
Rent Due	540	Rates in Advance	308
Commission Receivable	218	Rent Received in Advance	1,680

4.0 CONCLUSION

We have discussed accruals and prepayments adjustments that may arise in the course of preparation of final accounts for any form of business. We have also discussed various methods that may be applicable in the treatment of an item of expense and income in the final accounts. The Unit compliments other Units that are about adjustments to final accounts.

5.0 SUMMARY

In this Unit, we have explained the accounting treatments of prepaid and accrued expenses, income received in advance and income due. The Unit demonstrates how these issues are incorporated in the final accounts of any form of business.

6.0 TUTOR-MARKED ASSIGNMENT

1) Briefly explain the accounting treatment for the following items:

a) Prepaid Expenses; b) Accrued Expenses
c) Income in Advance d) Income Due

2) Differentiate between Insurance Receivable and Insurance Received, indicating how they are treated in ledger accounts.
3) Discuss how four different accounts could be created for "rent" on paid, received, payable and receivable, and how they are to be closed to the final accounts.
4) Differentiate between the following pairs of terms:

a) "Prepayment to" and "Prepayment by".
b) "Discount received" and "Discount allowed".

c) "Interest payable" and "Interest accrued".

5) *CHOP-CHOP* is one of the easy going traders in Sabon Gari market, who deals in ladies clothing. Below is his trial balance as at 30th June, 2004.

	DR. ₦	CR. ₦
Directors Loan		7,500
Drawings	3,000	
Capital		60,000
Sales and Purchases	26,100	42,000
Carriage	3,000	
Returns	450	1,200
Land and Building	43,000	
Mortgage Loan		7,100
Postage and Stationery	700	
Creditors and Debtors	18,000	12,700
Stock 1st July 2003	3,000	
Furniture and Fittings (cost ₦4, 500)		4,050
Rent	4,200	3,750
Motor Van (cost ₦10, 000)	8,500	
Wages and Salaries	4,650	
Motor Repairs	900	
Lighting and Heating	750	
Insurance	1,450	
Discounts	1,050	1,350
Bank	12,000	
Provision for doubtful debts		600
Provision for discount on debtors		400
Cash	2,250	
Provision for depreciation:		
Motor Van	1,500	
Furniture and Fittings		500
Suspense Account		450
	139,050	139,050

The following additional information is provided:

a. Stock at 30th June, 2004 was valued at ₦4,250.
b. Insurance prepaid amounts to ₦200.
c. Of the carriage, ₦600 is for carriage inwards.
d. Wages and salaries paid is made up of ₦1,650 and ₦3,000 respectively; while ₦450 salaries is still being owed.

e. A fire incident occurred in the store on 25th June, 2004, stock valued ₦4,000 was destroyed, this stock has been insured and the insurance company accepted the claim in full.
f. 10% of the Debtors is considered bad; while provision on the good debtors is to be made as follows:

Doubtful debts	5%
Discount	2%

g. Depreciation is to be charged at the rate of 10% on cost and 20% on reducing balance for Motor van and Furniture and fittings.
h. The suspense account appearing in the books was for the sales of an item of furniture bought on 1/1/2001 for ₦1,000 and the cash account has been debited with the proceeds received.

You are required to prepare:

i. A trading, profit and loss Account for the year ended 30th June, 2004; and
ii. A balance sheet as at that date.

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

Dandago, K.I. *Financial Accounting Simplified*.

Inanga, E.L *Principles of Accounting*.

Omuya, J.O. *Frank Wood's Business Accounting 2*.

UNIT 2 PROVISIONS FOR BAD AND DOUBTFUL DEBTS

CONTENTS

1.0 INTRODUCTION

Once a business decides to sale its goods or services on credit, it is bound to have three types of debtors: good, doubtful and bad. Good debtors are the dream of any business, since they are those debtors that are guided by their conscience and honor; as they buy on credit, they are determined to pay back on or before the maturity date. Doubtful debtors need some incentive/motivation before they effect payment on purchases made on credit, while bad debtors need to be written off the accounts when confirmed to be such! This Unit attempts an overview of these types of debtors and discusses how they are to be treated in the books of accounts of any serious business organization.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate the type of debtors a business may have in its accounts
- adjust for bad and doubtful debtors in the books of accounts
- adjust for drawings made by a business proprietor
- treat for stock value in the final accounts.

3.0 MAIN CONTENT

3.1 Provisions for Bad and Doubtful Debts

3.2 Bad Debts

These are debts which are found to be irrecoverable. If detected before drafting the trial balance, they should simply be posted as expenses to the profit and loss account and no more. But where such losses are detected after drafting the trial balance, the amount so detected is posted as an expense to the profit and loss account and deducted from the debtors balance in the balance sheet.

DR: Bad Debt Account
CR: Debtor's Account

The bad debt account is to be closed to the profit and loss account, as an expense.

Where a debt already written off as bad is recovered in whole or in part in subsequent period, the entries required are:

DR: Cash/Bank Account
CR: Bad Debt Recovered Account

The bad debt recovered account is to be closed to the profit and loss account, as a gain.

3.3 Doubtful Debts

These are debts on which the creditor is uncertain as to their recoverability. The debtor might be willing but unable to pay, or able but unwilling to pay as on the maturity date. To be prudent, an estimate is to be made on the percentage value of such debtors and provision made against them out of the expected profit of the business. The amount provided is to be deducted from the total value of debtors and charged to the profit and loss account.

3.3 Provision

This refers to the commitment made out of profit on the likely diminutions in the value of an asset or for any known liability for which the amount involved cannot be determined with substantial accuracy.

Provisions commonly found in the profit and loss account of a business are:

i. Provision for doubtful debt;
ii. Provision for discount on debtors; and
iii. Provision for depreciation.

Under this heading we shall discuss I and II only as III would be adequately discussed in Unit 4.

a) Provisions for Doubtful Debts

This is provision made out of profit to meet debt which is likely to turn bad. It is usually provided for after all debt which is known to be irrecoverable has been written off. A provision for doubtful debt may be calculated either by:

i) Reference to the amount of the specific debt (specific provision for bad debt);
ii) As a percentage of the total debt outstanding after deducting irrecoverable one (general provision for doubtful debt).

In practice, the percentage most likely to turn bad is arrived at based on the debtor(s) history. This percentage therefore constitutes the rate which shall be used in providing for doubtful debts and those not fluctuating widely.

The Accounting entries required for recording provisions for doubtful debts are:

DR: Bad debt account
CR: Provision for doubtful debts account

To create provisions for doubtful debts; bad debt account is to be closed to the profit and loss account, while provision for doubtful debt account is to be closed to the balance sheet.

DR: Provision for doubtful debts account
CR: Profit and loss account
With a decrease in the provision for doubtful debts

The provision for doubtful debts (closing balance) is deducted from the debtors balance in the balance sheet to ascertain the net good debtors.

b) Provision for discount on debtors

This provision is allowed on good debtors and it is usually based on a fixed percentage of good debtors i.e. debtors less bad debt less provision for doubtful debts. The account is provided in a similar manner as that of provision for doubtful debts.

SELF ASSESSMENT EXERCISE 1

1. Discuss the term Provision for Doubtful debt.
2. Describe the entries to be made in Provision for discount account.

3.4 Drawings

The effect of drawings by the owner of a business for personal use is to decrease the capital invested in it. Drawings may be made in cash or in the form of goods and services. Drawings made in cash required a credit entry in the bank account and debit entry in the drawings account. If drawings are made in the form of goods purchased by the business for resale, then Drawings account is debited and sales account credited with the value of goods withdrawn. The balance of the drawings account is subsequently closed at the end of the year and deducted from the capital.

SELF ASSESSMENT EXERCISE 2

1. Discuss the concept of drawings in accounting.
2. Describe two ways through which drawings would decrease capital.

3.5 Stock

The usual practice in accounting is to value the goods at the lower of cost or current market price (i.e. net realizable value). This means that the closing stock of goods should not be valued above the original price paid, but if the current price is lower than original price, the current price should be taken as the valuation basis.

3.6 Illustrative Example

Mal. Mamuda Zubair had the following trial balance as at 31st December, 2005.

	DR.	CR.
	₦	₦
General expenses	2,110	
Sales and Purchases	435,860	486,990
Debtors and Creditors	28,380	16,930
Salaries and Wages	17,620	
Insurance	1,300	
Carriage Inwards	2,860	

Capital			172,950
Carriage Outward	590		
Bad debts	1,060		
Drawings	12,000		
Office Equipment at cost	55,000		
Sales and Purchases Returns	1,950	9,870	
Cash in hand	1,270		
Provision for Depreciation:			
Motor vehicles		6,300	
Office Equipment		4,700	
Furniture		3,400	
Motor Vehicles at cost	72,000		
Stock on 1st Jan. 2005	39,720		
Lighting and Cooling	1,180		
Rent	3,600		
Discounts	4,080	6,270	
Furniture at cost	32,500		
Provision for doubtful debts		2,000	
Provision for discount allowed		500	
Bank	____	3,170	
	713,080	713,080	

The following additional information is given:

a. Additional general expenses of ₦650 are yet to be paid.
b. Stock on 31st December, 2005 amounted to ₦43,860.
c. A bill of ₦420 for insurance is still outstanding.
d. Lighting and Cooling of ₦270 has been paid in advance.
e. Rent paid is for 9 months up to 30th September, 2004.
f. A provision should be made as follows:

5% for bad and doubtful debt
2.5% for discount allowed.

g. Provide for depreciation as follows:

Motor vehicle	5% p.a. on cost
Office Equipment	10%p.a.on cost
Furniture	5% p.a. on cost

You are required to prepare:

i. A trading, profit and loss account for the year ended 31st December, 2005; and
ii. A Balance sheet as at that date.

SOLUTION

Mal. Mamuda Zubair

Trading, Profits and Loss Account for the year ended 31st December, 2005

	₦	₦		₦	₦
Opening Stock		39,720	Sales	486,990	
Purchases	435,860		Less: Returns	(1,950)	485,040
Less: Returns	(9,870)	425,990			
Add: Carriage Inwards		2,860			
Cost of goods available for sale		468,570			
Less: Closing Stock		(43,860)			
Cost of goods sold		424,710			
Gross Profit c/d		60,330			
		485,040			485,040
General expenses	2,110		Gross Profit b/d		60,330
Add: Amount unpaid	650	2,760	Discount Received		6,270
Salaries and Wages		17,620	Provision for doubtful debts	2,000	
Insurance	1,300		Less: New provision	(1,419)	581
Add: Amount Outstanding	420	1,720			
Carriage Outwards		590			
Bad Debts		1,060			
Lighting & Cooling	1,180				
Less: Amount Prepaid	(270)	910			
Rent	3,600				
Add: Amount owing	1,200	4,800			
Discount Allowed		4,080			
Provision for discount	674				
Less: Old Provision	(500)	174			
Provision for Depreciation:					
Motor vehicle	3,600				
Office Equipment	5,500				
Furniture	1,625	10,725			
Net Profit		22,742			
		67,181			67,181

Balance Sheet As At 31st December 2005

	₦	₦	Fixed Assets:	₦	
Capital		172,950	Office Equipment	55,000	
Add: Net Profit		22,742	Less: Provision for Depreciation	(10,200)	44,
		195,692	Motor Vehicles	72,000	

Less: Drawings		(12,000)	Less: Provision for Depreciation	__
		183,692	Furniture	
			Less: Provision for Depreciation	__
CurrentLiabilities:			Current Assets:	
Creditors	16,930		Stock	
Bank Overdraft	3,170		Debtors	
General Expenses Unpaid	650		Less: Provision for doubtful debts	
Insurance Outstanding	420		Less: Provision for discount	__
Rent Owed	1,200	22,370	Lighting & Cooling in advance	
			Cash in hand	
		206,062		

4.0 CONCLUSION

This Unit is an emphasis on the treatment of customers' accounts, especially those buying goods or services on credit. As they delay payment of the value given to them on credit, relevant records have to be maintained to show the relationship between them and the business. Students have to appreciate, therefore, the various adjustments that may arise in the course of preparation of final accounts for any form of business that deals with debtors. The Unit compliments Unit 1, 3 and 4 on the issue of adjustments to final accounts.

5.0 SUMMARY

In this Unit, we have explained the accounting treatments of bad debts, provisions for bad and doubtful debts, and provision for discount on debtors, drawings and stock. We have also demonstrated how these issues are incorporated in the final accounts.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly explain the accounting treatment for the following items:

a) Doubtful Debtor b) Good Debtor
c) Provision for bad debts d) Stock

2) Differentiate between provision for doubtful debt and provision for discount.
3) Write good article on the topic: "Accounting for Three Types of Debtors".
4) The following trial balance has been extracted from the ledgers of Yaa Tundela Enterprise.

Trial Balance as at 31 December, 2006

	DR	**CR**
	₦	**₦**
Sales		10,500
Purchases	4,500	
Carriage inwards	700	
Rent, rates and insurance	1,400	
Stationery	500	
Salaries and wages	1,250	
Bad debts	350	
Provision for doubtful debt		145
Debtors	12,000	
Creditors		18,000
Cash in hand	10,000	
Cash at bank	24,000	
Stocks	720	
Equipment	8,000	
Motor vehicles	9,500	
Buildings	10,000	
Capital		60,525
Drawing	6,250	
	89,170	89,170

The following additional information is relevant:

i) Rent prepaid at the end of the year is ₦150
ii) The provision for bad debt is to be increased by ₦355
iii) Stock at the end of the year was ₦250
iv) Depreciate all fixed assets at the rate of 15%

You are required to:

Prepare a trading, profit and loss account for the year ended 31st December 2006 and a balance sheet as at that date.
(Adapted from ICAN/ATSWA, 2008)

5. *Mr. Wala Wala* carries on trading business. The trial balance extracted from his books as on 31st March, 2005 was as follows:

	₦	₦
Stock at 1st April, 2004	3,710	

Purchases	20,480	
Wages	4,610	
Rent, rates and insurance	770	
Salaries	5,120	
Discount allowed	200	
Carriage inwards	380	
General expenses	2,690	
Professional charges	320	
Carriage outwards	470	
Motor vehicles	1,220	
Plant and machinery at cost	4,800	
Leasehold Factory Premises Purchased 1st April, 2004		7,000
Capital		10,000
Sales		42,080
Discount received		250
Provision for doubtful debts		500
Sundry Creditors		2,950
Provision for depreciation:		
Plant and machinery		1,340
Motor Vehicles		580
Sundry Debtors		3,950
Balance at bank		1,980
	57,700	57,700

You are given the following information:

i. The value of stock on the premises at cost on 31st March, 2005 was ₦3,970. The replacement value of such stock was ₦4, 000.

ii. Insurance paid in advance at 31st March, 2005 amounted to ₦20 and there was ₦50 owing for electricity (included in general expenses) at that date.

iii. A debt of ₦50 is to be written off and the provision for doubtful debt reduced to ₦400 at the year end.

iv. During the year, a motor vehicle which had cost ₦600 and which has been written down to ₦200 was sold for ₦480. The amount had been credited to motor vehicles account. Any profit or loss on this sale is to be in the profit and loss account.

v. *Mr. Wala wala* had drawn ₦20 a week for his own use. These amounts have been entered in the salaries account.

vi. Provision for the year for depreciation of motor vehicles and plant and machinery is to be made in the sums of ₦190 and ₦250 respectively.

vii. An amount of ₦140 in respect of legal charges on the acquisition of the leasehold premises is included in the professional charges account.

viii. The total cost of the lease is to be written off by equal installments over 20 years.

You are required to prepare:

a) Trading, Profit and loss account for the year ended 31st March, 2005 and a
b) Balance Sheet as at 31st March, 2005.
(CIBN Exams)

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

Dandago, K.I. *Financial Accounting Simplified*.

Inanga, E.L *Principles of Accounting*.

Omuya, J.O. *Frank Wood's Business Accounting 2*.

UNIT 3 METHODS OF PROVIDING FOR DEPRECIATION

CONTENTS

1.0 INTRODUCTION

There are capital expenditures that are incurred for the purpose of generating revenue in the future and, since the benefit will accrue to more than one accounting period, it is usual to spread the cost over the expected years when such expenditures are expected to bring benefit. The process of spreading the cost is referred to as depreciation, which shall be the focus of our discussion in this Unit. A number of methods of providing for depreciation would be discussed, giving illustrative examples.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define Depreciation
- appreciate various methods of providing for depreciation
- understand how to compute depreciation on an asset acquired during the year
- maintain accounting records for depreciation.

3.0 MAIN CONTENT

3.1 Depreciation Methods

3.2 Definition of Depreciation

Depreciation may be defined as the permanent and continuing diminution in the quality, quantity or value of a fixed asset. Depreciation is therefore the proportion of the cost of an asset that is deducted from revenue for assets services used in the operation of a business. Depreciation is simply about decrease in the value of a fixed asset, as a result of wear and tear, passage of time, heat of sun, etc. However, there are other terms used in defining depreciation. These terms are “depletion” and “amortization’. Depletion refers to the depreciation of an available but irreplaceable resource such as extraction of coal from coal mine or oil out of an oil well. Amortization, on the other hand, refers to the writing off of an obligation like loan.

The basic differences between depreciation and these other concepts is that depreciation is used to refer to the process of charging the cost of man- made fixed assets to operations whereas depletion refers to the cost allocations of natural resources such as oil and mineral deposits while amortization relates to cost allocation for intangible assets such as patents and copyrights.

SELF ASSESSMENT EXERCISE 1

1. What do you understand by the concept of depreciation?
2. Discuss any two other concepts related to depreciation.

3.3 Methods of Computing Depreciation

There are numerous methods of computing depreciation, broadly grouped into the following:

1. Uniform charge methods:

i. Fixed installments method;
ii. Depletion method;
iii. Machine hour rate method.

2. Declining charge methods:

i. Diminishing balance method;
ii. Sum of the years' digit method;
iii. Double declining method.

3. Other Methods:

i. Group depreciation method;
ii. Inventory or revaluation method;
iii. Annuity method;
iv. Sinking fund method; and
v. Insurance policy method.

For the purpose of this course, we shall restrict our discussion to the fixed installment, diminishing balance method, sum of the years' digit and inventory methods.

3.2.1 Fixed Installments Method

This is also termed as Straight line method. Under this method, depreciation is charged evenly every year throughout the effective life of an asset. Depreciation is calculated as:

$$\text{Depreciation} = \frac{C-S}{N}$$

Where C: Original cost of the Asset;
S: Estimated Scrap Value; and
N: Effective life of the Asset.

The depreciation to be charged each year can also be expressed as a percentage of cost. This percentage can be calculated as follows:

$$R = \frac{D}{DV} * 100$$

Where R: Rate of depreciation;
D: Depreciation computed; and
DV: Depreciable Value i.e. cost less scrap value.

Example 1

Baba 'Yargo acquired a Motor Vehicle for ₦10, 000. The vehicle was planned to be used in the business for four years and its scraped value estimated for ₦2, 000. Calculate the annual depreciation charge and the rate.

Solution

$$\text{Annual Depreciation} = \frac{C-S}{N}$$

$$= \frac{₦0,000 - ₦2,000}{4}$$

= N2, 000

Depreciation Rate = $\frac{D}{DV} * 100$

$\frac{₦,000}{₦8,000} * 100$

25%

3.2.2 Diminishing Balance Method

This method is also termed as reducing balance method. Under this method, depreciation is computed as a fixed percentage of the book value of an asset. The book value of an asset is the difference between the cost of the asset and the accumulated depreciation on the asset. Depreciation is calculated as:

Depreciation = R * NBV

Where R: Rate of depreciation; and
NBV: Net book value.

Depreciation rate (R) = $\{1 - \sqrt[n]{\frac{\text{Netresidualvalue}}{\text{Cost}}}\} * 100$

Where n: number of expected life of the asset.

Example 2

Alh. Ado purchased an item of office fittings for ₦1, 296 on 1st Jan. 2001. The balance at 31st December 2001 was ₦1, 100. At 31st December 2002 and 2003, the residual value of the asset was ₦850 and ₦625 respectively. Calculate the depreciation charge for 2001, 2002 & 2003.

Solution:
Depreciation = R* NBV

$$R = \sqrt[n]{\frac{s}{c}}$$

S = N625, C = N1, 296 n = 3

$$R = \sqrt[3]{\frac{₦625}{₦1296}}$$

$$\frac{25}{36} * 100$$

3.2.3 Sum of the Years' Digits Method

The amount of depreciation to be charged to the profit and loss account under this method goes on decreasing every year. The depreciation is calculated based on the following formula:

$$\frac{\text{RemainingLifeoftheAsset(includingthecurrentyear)}}{\text{Sum of all the digits of the life of the asset in years}} * \frac{\text{OriginalCost}}{1}$$

Example 3

Use the above example to calculate the amount of depreciation using the sum of the years' digits method.

Solution:

Depreciation for 2001	3/6 * (₦1,296- ₦625)	= ₦ 336
Depreciation for 2002	2/6 * (₦1,296- ₦625)	= ₦ 224
Depreciation for 2003	1/6 * (₦1,296- ₦625)	= ₦ 111

3.2.4 Inventory System of Depreciation

This method is mainly used for those assets with relatively small values such as loose tools or where the life of the assets cannot be ascertained with certainty e.g. live stock etc. Under this method, depreciation is calculated using the following basis:

	N
Cost of assets purchased at the beginning accounting year	x
Add: cost of the assets purchased during the accounting Year	x
Less: cost of the assets at the end of the accounting year	
Depreciation charged	x

Example 4

Refer to the question in example 2 above. Compute depreciation using the revaluation method.

Solution:

Depreciation for 2001:	₦
Opening Balance of Office fittings	1,296
Less: Closing Balance at 31 December 2001	1,100
Depreciation for the year	196

Depreciation for 2002:		
Balance at 1st January 2002	1,100	
Less: Closing Balance at 31 December 2002		850
Depreciation for the year		250
Depreciation for 2003:		
Balance at 1st January 2003		850
Balance at 31 December 2003		625
Depreciation for the year		225

SELF ASSESSMENT EXERCISE 2

1. Discuss Straight Line Method of providing for depreciation.
2. Differentiate between the Diminishing Balance Method and the Sum of the Years' Digit Method of providing for depreciation.

3.3 Depreciation on an Asset Acquired during the Year

There are two alternatives available regarding charging of depreciation on an asset which has been acquired during the course of an accounting year:

a) Depreciation may be charged for the full year irrespective of the date of purchase at the given rate.
b) Depreciation may be charged only for the part of the year for which the asset has been made available for use as a result of it being acquired during the year.

Students should note that where instruction as to the computation of depreciation on asset acquired during the year is not clearly given; assumption made should be stated categorically.

SELF ASSESSMENT EXERCISE 3

1) Differentiate between the two alternatives available regarding charging of depreciation on a newly acquired fixed asset.
2) Why must assumption be made categorically on depreciation accounting treatment?

4.0 CONCLUSION

This Unit is basically about the popular methods of computing depreciation that were emphasized on in the Statement of Accounting Standard (SAS) 9 issued by the Nigerian Accounting Standard Board (NASB). Illustrative examples were provided to make students understand how the methods are used in computing depreciation to be charged to the profit and loss account.

5.0 SUMMARY

In this Unit, we have defined depreciation and discussed methods of providing for depreciation. Alternative ways of charging depreciation on newly acquired assets were highlighted. All the major SAS 9 methods of providing for depreciation were discussed and exemplified for the clear understanding of the students.

6.0 TUTOR-MARKED ASSIGNMENT

1(a) What is depreciation?
(b) Why is it a non-cash expense?

2. Write a short note on the following concepts:

(a) Amortization
(b) Depletion
(c) Obsolescence.

3) Discuss any three methods of providing for depreciation.
4) Discuss the similarities between depreciation expense on an asset and salary paid to a worker.
5. Ankara textiles manufacturing company has the following machines in the factory on 1st January, 2006:

Model	**Cost**	**Depreciation written-off to date**
	N	N
Machine A	72,000	28,800
Machine B	48,000	19,200
Machine C	60,000	16,200

During the year ended 31st December, 2006, the following machines were bought on the dates shown:

Model	**Date of purchase**	**Cost**
		N
Machine D	01/02/2006	84,000
Machine E	31/03/2006	96,000
Machine F	01/08/2006	120,000
Machine G	01/12/2006	144,000

On 30 June 2006 Machine C was sold for N36, 000.

Depreciation is written off at the rate of 12% per annum on cost, new machines being depreciated from the date of purchase and any machine disposed off is depreciated up to the date of sale.

You are required to:

a) Prepare a statement showing the depreciation on each machine for the year ended 31st December, 2006.
b) Record the above transactions in the relevant ledger account, using

(i) Provision for depreciation account method.
(ii) Depreciation account method.

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

Dandago, K.I. *Financial Accounting Simplified*.

Inanga, E.L *Principles of Accounting*.

UNIT 4 ACCOUNTING FOR DEPRECIATION

CONTENTS

1.0 INTRODUCTION

In Unit 3, we have learnt about the concept of depreciation and the various methods of providing for it. In this Unit we shall appreciate the accounting treatment for depreciation in the relevant books of accounts and the final accounts. The Unit also discusses causes of depreciation and how to account for fixed assets disposal in the books of accounts.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain causes of depreciation
- compute depreciation for different categories of fixed assets
- maintain accounting records for depreciation
- appreciate how to treat depreciation in the books of accounts.

3.0 MAIN CONTENT

3.1Accounting for Depreciation

3.2 Causes of Depreciation

Assets get depreciated as a result of some factors which are discussed below:

1. ***Wear and Tear***: Constant use of fixed assets gets the asset worn or torn. Examples of these assets are plant and machinery, furniture and fixtures, etc.
2. ***Exhaustion***: An asset may get exhausted through utilization. This is the case with mineral mines, oil wells, etc.
3. ***Obsolescence***: Some assets are discarded before they are worn out as a result of improvement in technology. Such loss as a result of new innovations is referred to as loss on account of obsolescence.
4. ***Efflux of Time***: Certain assets get depreciated in their value with the passage of time. This is the case with leasehold properties, patents and copy rights.
5. ***Accidents***: An asset may meet an accident and, therefore, it may get depreciated in its value.

SELF ASSESSMENT EXERCISE 1

1. Define asset in the context of this Unit.
2. Discuss any three causes of depreciation.

3.2 Methods of Recording Depreciation

Depreciation can be recorded in the books of account using two different methods:

1. Provision for Depreciation Account Method

Under this method of accounting for depreciation, the amount of depreciation to be charged is debited to the profit and loss account and credited to the provision for depreciation account. The asset account appears at original cost.

2. Depreciation Account Method

Under this method, the amount of depreciation is debited to the depreciation account and credited to the assets account. The asset account thus appears at net book value. The depreciation account is closed to the profit and loss account like any other item of expense.

SELF ASSESSMENT EXERCISE 2

1. Why is depreciation account an expense account?
2. Differentiate between the two methods of recording depreciation.

3.3 Disposal of Fixed Asset

Where a fixed asset is disposed, the amount realized from the sale of the asset should be credited to the Disposal account (if provision for depreciation account method is in use) or Asset account (if depreciation account method is in use). Depreciation for the period for which the asset has been used should be written off in the usual manner. Any balance in the Asset Disposal Account representing profit or loss on sale of the asset should be transferred to the Profit and Loss Account.

SELF ASSESSMENT EXERCISE 3

1. What is an asset disposal account?
2. Explain the entries to be made in the asset disposal account.

3.4 Illustrative Example

Chukwu & Son Ltd. started production on 1 January 2004. He purchased factory plant as follows:

2004		₦
1 January	Machine A	80,000
1 July	Machine B	40,000
2006		
1 April	Machine C	60,000

Depreciation, at the rate of 10% p.a., is to be provided on a straight line basis. On 1 July 2005, machine B was sold for ₦24, 000.

Required:

You are required to write up the relevant Ledger Accounts and Balance Sheet Extract for the years 2004, 2005 and 2006, using:

(a) Provision for depreciation account method
(b) Depreciation account method (Adapted from ICAN/ATSWA, 2008).

SOLUTION

Provision for Depreciation Account Method

Chukwu & Sons Ltd

Machinery Account

2004		₦	2004		₦
1-Jan	Bank (Machine A)	80,000	31-Dec	Balance c/d	120,000
1-Jul	Bank (Machine B)	40,000			
		120,000			120,000
2005			2005		
1-Jan	Balance b/d	120,000	1-Jul	Disposal (Machine B)	40,000
			31-Dec	Balance c/d	80,000
		120,000			120,000
2006			2006		
1-Jan	Balance b/d	80,000	31-Dec	Balance c/d	140,000
1-Apr	Bank (Machine C)	60,000			-
		140,000			140,000
	Balance b/d	140,000			

Machinery Disposal Account

2005		₦	2005		₦
1-Jul	Machine	40,000	1-Jul	Prov. For depreciation	4,000
			1-Jul	Bank	24,000
			1-Jul	Profit & Loss	12,000
		40,000			40,000

Provision for Depreciation Account

2004		₦	2004		₦
31-Dec	Balance c/d	10,000	31-Dec	Profit and loss	10,000
2005			2005		
1-Jul	Disposal (Machine B)	4,000	1-Jan	Balance b/d	10,000
31-Dec	Balance c/d	16,000	31-Dec	Profit and loss	10,000
		20,000			20,000
2006			2006		
31-Dec	Balance c/d	28,500	1-Jan	Balance b/d	16,000
			31-Dec	Profit and loss	12,500
		28,500			28,500
				Balance b/d	28,500

CHUKWU
BALANCE SHEET (EXTRACTS) AS AT 31ST DECEMBER

	Fixed Assets	₦	₦
2004	Cost (Machines)	120,000	
	Accumulated depreciation	(10,000)	
			110,000
2005	Cost (Machines)	80,000	
	Accumulated depreciation	(16,000)	
			64,000
2006	Cost (Machines)	140,000	
	Accumulated depreciation	(28,500)	
			111,500

Workings:

Computation of Depreciation

			₦
2004	Machine A = 10% x 80,000	=	8,000
	Machine B = 10% x 40,000 x $^{6}/_{12}$	=	2,000
			10,000
2005	Machine A = 10% x 80,000	=	8,000
	Machine B = 10% x 40,000 x $^{6}/_{12}$	=	2,000
			10,000
1 July	Disposal = 10% x 40,000 x $^{12}/_{12}$	=	4,000
2006	Machine A 10% x 80,000	=	8.000
	Machine C = 10% x 60,000 x $^{9}/_{12}$	=	4,500
			12,500

b) Depreciation Account Method

Machinery Account

2004		₦	2004		₦
1-Jan	Bank (Machine A)	80,000	31-Dec	Depreciation	10,000
1-Jul	Bank (Machine B)	40,000	31-Dec	Balance c/d	110,000
		120,000			120,000
2005			2005		
1-Jan	Balance b/d	110,000	1-Jul	Disposal (Machine B)	36,000
			31-Dec	Depreciation	10,000
			31-Dec	Balance c/d	64,000
		110,000			110,000
2006			2006		
1-Jan	Balance b/d	64,000	31-Dec	Depreciation	12,500
1-Apr	Bank (Machine C)	60,000	31-Dec	Balance c/d	111,500
		124,000			124,000
	Balance b/d	124,000			

Depreciation Account

2004		₦	2004		₦
31-Dec	Machinery	10,000	31-Dec	Profit & Loss Account	10,000
2005			2005		
31-Dec	Machinery	10,000	31-Dec	Profit & Loss Account	10,000
2006			2006		
31-Dec	Machinery	12,500	31-Dec	Profit & Loss Account	12,500

Machinery Disposal Account

2005		₦	2005		₦
1-Jul	Machinery	36,000	1-Jul	Bank	24,000
			31-Dec	Profit & Loss	12,000
		36,000			36,000

Chukwu & Sons Ltd
Balance Sheet as at 31st December

Fixed Asset		₦
2004	Machinery	110,000
2005	Machinery	64,000
2006	Machinery	111,500

4.0 CONCLUSION

This Unit has discussed the method of writing off the cost of fixed assets into the depreciation account of a reporting entity in order to ensure that correct profit/loss is determined to show the entity's result of operations for a period ending. Correct amount of profit/loss can only be ascertained if all expenditures (recurrent and capital) that provide the income are fully accounted for in the relevant sections of the final accounts.

5.0 SUMMARY

In this Unit, we have discussed causes of depreciation, methods of recording depreciation into the books of accounts and the accounting treatment of disposal fixed asset. Of note is that, depreciation is not charged for the purpose of replacing fixed asset, but as a means of charging the fair share of the asset cost to the profit and loss account, to show its extent of utilization in the course of generating income for the reporting entity.

6.0 TUTOR-MARKED ASSIGNMENT

1(a) Describe depreciable asset.
(b) Outline any four causes of depreciation.

2) Write a short note on the following concepts:

(a) Fixed Asset
(b) Efflux of Time
(c) Wear and Tear

3) Discuss any two methods of accounting for depreciation.
4) Write a paper for presentation to newly admitted students of the Accounting Technicians Scheme of West Africa (ATSWA) on the topic: Understanding the concepts of Depreciation, Provision for Depreciation and Assets Disposal.

5) An extract from the account of *XYZ and Sons* is shown below:

	Plant and Machinery	*Motor vehicle*	*Total*
	₦	₦	₦
Cost at 30/9/2004	58,750	42,820	101,570
Depreciation to date	26,250	23,140	49,390
Net book value	32,500	19,680	52,180

In the year to 30th September 2005 there were additions and disposals as follows:

	Plant and Machinery	*Motor vehicle*	*Total*
	₦	₦	₦
Cost of disposed Assets	14,200	9,060	23,260
Depreciation on disposed assets	11,100	5,900	17,000
Sale proceeds	2,000	5,400	7,400
Cost of additions	12,500	14,730	27,230

The following rates of depreciation apply:

Plant and Machinery: 10% of cost.
Motor Vehicles: 10% of net book value.

Required:

You are required to write-off the various assets, depreciation and disposal accounts for the year ended 30th September, 2005.

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

Dandago, K.I. *Financial Accounting Simplified*.

Inanga, E.L *Principles of Accounting*.

UNIT 5 ACCOUNTING FOR FIXED ASSETS

CONTENTS

1.0 INTRODUCTION

According part 1 of the Statement of Accounting Standard (SAS) 3, property, plant and equipment, generally referred to as fixed assets, are those tangible resources of an enterprise which are employed in its operations. In many enterprises, these assets are grouped into various categories such as land and buildings, plant and machinery, equipment, furniture, fixtures and fittings, vehicles, etc. This Unit deals with the introductionary aspects of accounting for fixed assets and related issues.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

appreciate the concept of fixed assets understand
ways of accounting for fixed assets differentiate
between leased and owned fixed assets
appreciate the need to provide for fixed assets depreciation.

3.0 MAIN CONTENT

3.1 Accounting for Fixed Asset

3.2 Relevant Concepts Surrounding Fixed Asset

Fixed assets are tangible assets that have been acquired or constructed and held for use in the production or supply of goods and services and may include those held for maintenance or repair of such assets; and are not intended for sale in the ordinary course of business.

Leasehold rights over assets which meet the above criteria may also be treated as property, plant and equipment in certain circumstances. The fair value of a fixed asset is the amount for which an asset could be exchanged between a knowledgeable willing buyer and a knowledgeable willing seller in an arm's length transaction, while its net book value is the amount at which an asset is carried in the books less the related accumulated depreciation.

The useful life of a fixed asset is the shorter of (a) the predetermined physical life and (b) the economic life during which it could be profitably employed in the operations of the enterprise. The recoverable amount of a fixed asset is that part of the net book value of a fixed asset that an enterprise can recover in the future through depreciation of the item including its net realizable value on disposal.

SELF ASSESSMENT EXERCISE 1

1. What do you understand by the term fixed asset?
2. Differentiate between Leasehold and Freehold fixed asset.

3.3 Valuation of Fixed Assets

Fixed assets are stated in the financial statements of reporting entities at cost (usually historical cost) or valuation less accumulated depreciation. The cost is normally a combination of purchase price and other expenses, including installation expense, up to the stage of usage of the assets. Fixed assets on lease are accounted for strictly in accordance with their legal form as fixed assets. The relevant assets are purchased in the name of an enterprise and subsequently leased to customers as operating leases.

SELF ASSESSMENT EXERCISE 2

1. Why is fixed asset cost a combination of two or more variables?
2. What is legal form?

3.4 Depreciation Policy of Fixed Assets

Depreciation charged on fixed assets is usually calculated by most businesses on the straight-line basis to write off their costs over their estimated useful lives at different annual rates. For example, the following annual rates could be applied by an enterprise in providing for depreciation of its fixed assets:

Freehold buildings	2%
Leasehold buildings and improvements: 50years and over	2%

Below 50 years over the term of the lease Assets on lease over the term of the lease:

Motor vehicles	25%
Furniture and fittings	20%
Machinery and equipment	20%
Computer equipment	20%

It should be noted that no depreciation is charged on fixed assets until they are put into use.

SELF ASSESSMENT EXERCISE 3

1. Describe depreciation policy of an organization.
2. Why are most businesses using straight-line basis of providing for depreciation?

3.5 Methods of Recognizing Fixed Assets and Liabilities

Assets are resources controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. Liabilities, on the other hand, represent obligations of the enterprise arising from past events, settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

For the purpose of recognizing assets and liabilities in the balance sheet, IAS 5 provides recognition:

a) When there is probability that a future inflow or outflow of benefit to or from the entity will occur; and
b) When the asset or liability can be measured as a monetary amount with sufficient reliability.

In circumstances where legal principles contradict the financial realities of a transaction, the substance of the transaction should be accounted for while its legal principles are ignored. Accountants are often faced with this conflict in certain transactions such as:

3.5.1 Sale and Repurchase Agreement

These arrangements occur where an asset is sold by the seller to a buyer on terms that the seller repurchases the asset from the buyer at a future date. This transaction has two possible interpretation of either a secured loan or a sale-lease back. If the arrangements provide that the seller retains right to determine asset's use while the buyer only receives return (secured loan) the asset will only be recognized in the books of the seller. The transfer of title by way of purchase is ignored.

3.5.2 Finance Lease Arrangement

Where the transaction resembles a finance leasing arrangements i.e. the ownership title passes to the buyer, the assets shall be recorded as that of the buyer.

SELF ASSESSMENT EXERCISE 4

1. What are the IAS 5 provisions for recognizing assets and liabilities?
2. Differentiate between purchase of asset and its lease.

3.6 Cost of Self-Constructed Fixed Asset

Enterprises sometimes self-construct some fixed assets for their own use, usually to save costs, meet unique specification or utilize idle capacity.

The cost elements of self-constructed fixed assets are costs of materials, labor and overheads that are directly attributable to the construction less any trade discounts, rebates or internal profits. Interest costs which are attributable to the period of constructing the item of fixed asset are sometimes added to its cost. Other costs, including cost of inefficiency in production of self-constructed items of fixed assets such as the idle capacity, industrial disputes and similar costs, are expensed in the period in which they arise.

3.7 Components of Fixed Asset Cost

SAS 3 provides that the cost of an item of fixed asset comprises: its purchase price, including import and non-recurring levies (e.g. development levies, consent fee, etc) and any directly attributable costs of bringing the asset to its location and working condition for its intended use. Any trade discount and rebates are deducted in arriving at the purchase price.

SELF ASSESSMENT EXERCISE 5

1. Discuss the process of determining self-constructed fixed asset cost.
2. Comment on SAS 3 provision on composition of fixed asset cost.

3.8 Illustrative Examples

Illustration One

The elements of cost for Land and its Improvements:

(a) Original purchase price
(b) Broker's or Estate Agent's commission
(c) Legal fees for examining, recording and securing title
(d) Cost of survey
(e) Cost of obtaining vacant possession
(f) Payment of non-recurring levies on the land at date of purchase if payable by the purchaser.

Cost of demolishing any old structure (net of salvage) is sometimes added to the cost of land and sometimes to the cost of the building on the site.

Some additional costs may be incurred subsequent to purchase in order to improve the land for the intended purpose. Such costs, which are often capitalized, include the following:

(i) Filling and draining
(ii) Clearing
(iii) Landscaping
(iv) Grading and sub-dividing
(v) Access road, etc

Illustration Two

The elements of cost for Buildings:

(a) Original purchase price or cost of construction.
(b) Cost of remodeling, reconditioning, or altering a building to render it suitable for its intended use.
(c) Cost of excavating or filling of land for the specific building.
(d) Foundation costs such as rock blasting, piling and rechanneling of canal or underground stream.
(e) Cost of building permits.
(f) Payment of development levies on the building at the date of purchase if payable by the purchaser.
(g) Professional fees for design, supervision and management of the construction.
(h) Cost of temporary buildings used during the construction period less disposal proceeds.

The cost of ancillary building plants such as lifts and air-conditioning systems, etc, are sometimes recorded separately from the cost of the building.

Illustration Three

The elements of cost for Plant and Equipment:

(a) Original purchase price or cost of construction.
(b) Freight, import duties and handling charges.
(c) In-transit insurance charges.
(d) Taxes and levies.
(e) Cost of preparation of foundations, insulations, protective and other special devices.
(f) Commissioning, including testing and running-in costs in preparation for use.
(g) If the item is a second-hand one, the cost of refurbishing it for the intended use.

4.0 CONCLUSION

Fixed assets constitute a great percentage of the total assets value of business enterprises, especially manufacturing businesses. The value of each item of fixed asset needs to be determined as critically as possible so that the asset is not over-valued or under-valued. Fixed assets are subject to wear and tear, passage of time and other reasons why fixed assets' value would depreciate. The depreciation expense has to be determined and deducted from the book value of the asset with a view to ascertaining the net book value of the asset at any given time. This Unit is an attempt at highlighting all these issues in an introductory way for the students to achieve the objectives set above.

5.0 SUMMARY

This Unit has discussed the concept of fixed assets and related issues, valuation of fixed assets, depreciation policy and how it is determined, components of fixed asset costs and cost of self-constructed fixed assets. The Unit is strong follow up to the provisions of the Statement of Accounting Standards (SAS) 3, issued by the Nigerian Accounting Standard Board (NASB).

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss any three important concepts relevant to fixed asset.
2. Why is depreciation necessarily determined on the value of fixed assets?
3. Explain one method each for asset and liability recognition.
4. Discuss the justification for three elements of cost summing up to the cost of building as a fixed asset.
5. Discuss the statement: ‘Fixed assets are stated at cost or valuation less accumulated depreciation’.

7.0 REFERENCES/FURTHER READING

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MODULE 2

UNIT 1 FINAL ACCOUNTS FROM INCOMPLETE RECORDS

CONTENTS

1.0 INTRODUCTION

An incomplete record is a set of accounts in which no full accounting records are available for the extraction of trial balance, yet the determination of profit from such records is necessary to show the result of the business operations and its financial position. This Unit will enable you to learn the preparation of final accounts from incomplete records.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define incomplete records and appreciate their disadvantages
- understand the indication of incomplete records
- determine profit of a business from incomplete sets of records
- prepare final accounts from sets of incomplete records.

3.0 MAIN CONTENT

3.1 Final Accounts from Incomplete Records

3.1.1 Meaning of Incomplete Records

An incomplete record is any system of records which are kept not in complete compliance with double entry principles. The level of incompleteness of the records varies from having double entry in respect of certain transactions to no entry in respect of certain transactions. The system, therefore, has the following disadvantages:

i) Difficulty in ascertaining the arithmetical accuracy of records;
ii) Difficulty in ascertaining the actual profit of a business;
iii) Difficulty in determining the exact financial position of a business;
iv) Difficulty in planning and decision making for the business's future.

SELF ASSESSMENT EXERCISE 1

1. What do you understand by Incomplete Record?
2. Discuss any two difficulties in using incomplete records.

3.2 Indication of Incomplete Records

The following are the indications of incomplete records:

a) **Availability of Personal Accounts:** In most incomplete records, personal accounts are usually kept to enable the business know how much it owes or owed by its customers. The personal accounts are those of various debtors and creditors.

b) **Reliance on Source Documents:** In order to obtain adequate records of business transactions one has to rely on source documents such as invoices for purchases and sales, receipts, credit and debit note, etc.

c) **Availability of Cash Book:** Cash book is usually maintained which takes into account both the personal and business transactions.

SELF ASSESSMENT EXERCISE 2

1. Discuss any two indications of incomplete records.

2. Why is bank statement important in preparing final accounts for a business that keeps incomplete records?

3.3 Determination of Profit and Other Items of Final Accounts

In determining the profit or loss of a business, one of the following approaches can be adopted:

a) **Net Worth Method:** Under this method, the profit of the business is deemed to be the difference between the net worth at two different dates. The date at the beginning and the date at the end of the period. The net worth is often determined as the difference between assets and liabilities. Some adjustments might be required when using this method, as follows:

Drawing: This is considered as part of the closing capital of a business that was withdrawn for private use. For the purpose of ensuring that a true profit figure is ascertained, drawing is added back to the closing capital in the profit statements.

Further Capital: Where in the course of a period, the proprietor introduced additional capital, this will make the capital at end to be higher than expected which might imply that a profit has been realized but it does not reflect profit per se. Such capital is usually deducted from the closing capital in the profit statement.

b) **Conversion Method:** This method is applied when single entry records are maintained for certain transactions. It enables detailed information of revenue and expenses of a business to be ascertained. In using this method, certain figures are implied as discussed below:

Sales: This can be determined where the opening and closing debtors' figures are provided as well as receipts from debtors. The balancing figures can be implied to be the sales value.

Purchases: This can be determined where the opening and closing figures for creditors are available and payments to suppliers are also given.

Cash and Bank Balances: These are determined by preparing a cash book. Total of receipts is compared with the total of payments and the difference is implied to be cash in hand or at bank.

Capital: This can be ascertained by comparing the opening assets and liabilities. The difference, that is the excess of assets over liabilities, represents capital.

Accounting Ratios: Sometimes one has to rely on past ratios in determining key financial information. Ratios that are to be used are mark-up, margin, stock turnover and net profit to sales. These ratios help in the determination of sales, purchases, stock and expenses.

SELF ASSESSMENT EXERCISE 3

1. Discuss the Net worth Method of Profit Determination.
2. Illustrate how to determine any three key financial items of information using accounting ratios.

3.4 Illustrative Examples

Illustration One:

Umar Musa keeps his books of accounts on single entry basis. The following information relates to his business for the years 2004 and 2005:

Assets and Liabilities	1/4/2004	31/3/2005
	₦	₦
Machinery	60,000	60,000
Stock	30,000	37,500
Debtors	63,000	102,000
Cash in hand	4,500	6,000
Creditors	52,500	57,000
Bills Payable	3,000	9,000
Loan from Abbati		15,000
Investment		30,000

In addition, Umar Musa has withdrawn ₦15, 000 from his account and also introduced ₦6, 000 additional Capital.

Required:

You are required to ascertain his net profit and prepare the balance sheet as at 31st March, 2005.

SOLUTION

Umar Musa

Statement of Affairs As At:

			1/4/2004	
31/3/2005				
Assets:	₦	₦	₦	₦
Machinery		60,000		60,000
Investment		-		30,000
Stock		30,000		37,500
Debtors		63,000		102,000
Cash in hand		4,500		6,000
Total Assets		157,500		235,500
Less: Liabilities:				
Loan from Mr. Abbati		-		15,000
Creditors	52,500		57,000	
Bills payable	3,000	(55,500)	9,000	(81,000)
Net worth/ Capital		102,000		154,500

Statement of Profit or Loss as at 31st March 2005

	₦	₦
Closing capital		154,500
Add: Drawings		15,000
		169,500
Less: Opening capital	102,000	
Additional capital	6,000	(108,000)
Profit for the year		61,500

Balance Sheet as at 31st March, 2005

	₦	₦		₦	₦
Capital		102,000	Fixed Assets:		
Add: Profit		61,500	Machinery		60,000
Add: Additional Capital		6,000	Investment		30,000
Less: Drawings		(15,000)			90,000
		148,500			
LongTermLiabilities:					
Loan from Mr. Abbati		15,000			
			Current Assets:		
CurrentLiabilities:			Stock	37,500	
Creditors	57,00 0		Debtors	102,00 0	
Bills payable	9,000	66,000	Cash in hand	6,000	145,50 0
		235,500			235,50 0

Illustration Two:

Double- Man is in business as a painter and decorator. He does not keep proper accounting records. The following information relates to his business.

Balance as at 1st January, 2004

	₦
Equipments and loose tools	150,000
Debtors	17,500
Stocks and work in progress	64,500
Prepaid rent	3,000
Creditors	12,600
Accrued electricity bill	1,200

Enquiries provided the following about the business for the year ended 31st December 2004.

(a) He received ₦258, 400 for decorating work while ₦9,600 was still owed to him.

		₦
(b) He draws cheques for:	Suppliers	83,200
	Drawings	40,000
	Rent and rates	1,800
	New decorating equipment	60,000
	Sundry business expense	1,700
	Electricity	2,400

(c) He owed ₦5, 600 for decorating materials and ₦200 for electricity.

(d) His equipment was valued at ₦180, 000 and stock at ₦58, 500 on 31st December, 2004.

Required:

You are required to prepare his Trading, Profit and Loss Account for the year ended 31stDecember, and a balance sheet as at that date.

SOLUTION

Double- Man

Statement of Affairs as at 1st January, 2004

<u>Fixed Assets</u>:	₦	₦
Equipment and Loose tools		150,000
<u>Current Assets:</u>		
Stock and work in progress	64,500	
Debtors	17,500	
Prepaid rent	3,000	85,000
Total Assets		235,000
Less: <u>Liabilities:</u>		
Creditors	12,600	
Accrued electricity bill	1,200	(13,800)
Capital as at 1st January 2004		221,200

Bank Account

	₦		₦
	258,40		
Debtors	0	Suppliers	83,200
		Drawings	40,000
		New Decorating Equipment	60,000
		Rent & Rates	1,800
		Sundry business expenses	1,700
		Electricity	2,400
		Bal. c/d	69,300
	258,40		258,40
	0		0

Debtors Account

	₦		₦
			258,00
Bal. b/d	17,500	Bank	0
	250,50		
Sales	0	Balance c/d	9,600
	268,00		268,00
	0		0
Bal. b/d	9,600		

Creditors Account

	₦		₦
	83,20		12,60
Bank	0	Bal. b/d	0
Bal. c/d	5,600	Purchases	76,20

			0
	88,80		88,80
	0		0
		Bal. b/d	5,600

Electricity Account

	₦		₦
Bank	2,400	Bal. b/d	1,200
Bal. c/d	200	Profit & Loss	1,400
	2,600		2,600
		Bal. b/d	200

Rent and Rates Account

	₦		₦
Bal. b/d	3,000	Profit & Loss	4,800
Bank	1,800		
	4,800		4,800

Equipment and Loose Tools Account

	₦		₦
	150,00		
Bal. b/d	0	Depreciation	30,000
			180,00
Bank	60,000	Bal. c/d	0
	210,00		210,00
	0		0
	180,00		
Bal. b/d	0		

Trading, Profit and Loss Account for the year ended 31 December, 2004

	₦		₦
			250,50
Opening Stock	64,500	Sales	0
Purchases	76,200		
Cost of goods available for sales	140,700		
Less: Closing Stock	(58,500)		
Cost of goods sold	82,200		
Gross Profit c/d	188,300		
			250,50
	250,500		0
			188,30
Rent and Rates	4,800	Gross Profit b/d	0

Sundry business expenses	1,700		
Electricity	1,400		
Depreciation of Loose tools	30,000		
Net profit	130,400		
	168,300		168,300

Balance Sheet as at 31st December, 2004

	₦	₦	Fixed Assets:	₦	₦
Capital		221,200	Equipment and Loose tools		180,000
Add: Net Profit		130,400			
Less: Drawings		(40,000)			
		311,600			
			Current Assets:		
Current Liabilities:			Stock	58,500	
Creditors	5,600		Debtors	9,600	
Electricity accrued	200	5,800	Cash at bank	69,300	137,400
		317,400			317,400

4.0 CONCLUSION

This Unit has explained the alternative methods for profit determination where a business fails to maintain adequate accounting records under the double entry system of book keeping. However, it is desirable that adequate records are kept by business since regulatory authorities such as the Board of inland/ internal revenue may not rely on income statement prepared under this system.

5.0 SUMMARY

This Unit concludes our discussion on financial accounting aspect of the syllabus. It addresses issues relating to ascertainment of profit from an incomplete records, using either the net worth or conversion methods. It is clear that despite the difficulties in relying on and using the single entry and incomplete records, final accounts could still be determined to show the financial position and result of operations of the reporting entity.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss any two methods of profit determination, using incomplete records.

2. On 1 January 2005 Henry Chukwuma commenced business. At that date, he purchased a shop premises for ₦1, 400,000 and paid ₦200, 000 for interior furniture and fittings. He also paid ₦400, 000 into the business Bank account. On 31 December 2006, he realized the need for a profit figure for the two years he had been in business, but his records were completely inadequate. At this date, the assets he possessed in addition to the premises and furniture and fittings were:

	₦
Stock/Inventories	600,000
Debtors/Receivables	104,000
Motor vehicle purchased (30 June 2006)	800,000
Cash at bank	250,000

He owed ₦140, 000 to trade suppliers and had borrowed ₦1, 000,000 from a friend. Interest accrued but unpaid on the loan amounted to ₦20, 000. Henry estimated that he was drawing ₦30, 000 a month from the business.

Required:

Compute the Net Profit for the period. (ICAN/ATSWA, 2008)

3. The following is the summarized Cash Book of Danjuma & Sons for the year ended 31st March, 2005.

CASH BOOK

	₦		₦
Bal. c/d	2,343	Cash paid to creditors	11,056
Cash from debtors	18, 235	Salaries	1,080
Additional capital	6,000	Postages and Stationeries	240
		General expenses	1,234
		Drawings	2,500
		Rent and Rates	570
		Bal. c/d	9,898
	26,578		26,578

Additional Information:

	1st April, 2004	31st March, 2005
	₦	₦
Stock	560	340
Debtors	1,202	988
Creditors	980	1,051
Accrued Salaries	420	75
Prepaid Rent	44	67

Required:

You are required to prepare a Trading, Profit and Loss Account for the year ended 31st March, 2005 and a Balance Sheet as at that date.

4) Al-Mustapha Trial keeps his books of accounts on single entry basis. The following information relates to his business for the year 2004 and 2005:

	31/12/2004	31/12/2005
	₦	₦
Buildings		450,000
Furniture	90,000	150,000
Motor Van	250,000	
Stock	150,000	250,000
Debtors	230,000	300,000
Loan		40,000
Creditors	23,000	35,000
Cash in hand	120,000	25,000
Bank Overdraft	17,000	

Almustapha Trial withdrew ₦250 per week. He sold an old motor vehicle for ₦10, 000 which proceed was invested in the business during the year.

Required:

You are required to determine his profit and prepare a balance sheet as 31/12/2005.

5. Iyabo High keeps a cash book as her only major book– keeping record. The following is a summary of her transactions for the year ended 30th June, 2003.

Cash book Summary

	₦		₦
Opening balance	1,642	Cash paid to creditors	37,248
Cash received from debtors	48,528	Salaries	4,498
Closing balance	2,060	Rent and Rates	1,648
		Lighting and Heating	336
		General expenses	3,562
		Drawings	4,938
	52,230		52,230

Her Assets and Liabilities on the 30th June, 2002 and 2003 were as follows:

	30/6/2002	30/6/2003
	₦	₦
Fixed assets at cost	4,400	4,400
Stock	4,242	5,296
Debtors	6,438	6,776
Rent and Rates prepaid	200	240
Creditors	3,684	3,782
Lighting and Heating accrued	62	84

Fixed assets should be depreciated at 10% on Cost.

Required:

You are required to prepare the trading, profit and loss account of Iyabo High for the year ended 30th June 2003 and a Balance Sheet as at that date. (NECO 2006).

7.0 REFERENCES/FURTHER READING

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UNIT 2 INTRODUCTION TO PARTNERSHIP FINAL ACCOUNTS

CONTENTS

1.0 INTRODUCTION

The law governing partnership, which is guided by the partnership Act of 1890, in Nigeria defined partnership as "the relation which subsists between persons carrying on a business in common with the view of profit". The number of persons, termed partners, who may form a partnership, is limited to 20 except (a) in the case of: (i) Solicitors; **(ii)** Accountants; **(iii)** Members of a recognized Stock Exchange, and (b) in the case of banking business where the limit is ten (10) except that the number may go up to 20 if each partner has bound of trade authorization.

This Unit discusses types of partners that could be found in partnership arrangements, partnership deeds, liabilities of partners, and advantages of partnership, types of partnership and partnership accounts to be maintained by a serious partnership business.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate types of partners and partnership
- understand the likely contents of the partnership deeds
- appreciate the liabilities that attributable to partners in a partnership business
- understand the advantages of partnership over sole proprietorship business
- learn about the types of accounts to be kept by a partnership business.

3.0 MAIN CONTENT

3.1 Partnership Final Accounts

3.1.1 Kind of Partners

3.1.1.1 Ordinary (or Active) Partner

This is a partner who has capital in the business and takes part in conducting the affairs of the business.

3.1.1.2 Sleeping (or Dormant) Partners

This is a partner who has capital in the firm (business). Such a Partner is responsible for the debts of the firm as if he were an ordinary partner. His name may or may not appear in the firm's name.

3.1.1.3 Nominal (Apparent or Quasi) Partner

This is a person who whilst not a partner in a partnership business, lends his name to the business. Such a person is said to be holding out as a partner and is therefore liable as a partner for credit given to the firm, on the assumption that he was actually a member of the firm.

SELF ASSESSMENT EXERCISE 1

1. How is a partner in a partnership business?
2. Discuss any two types of partners.

3.2 Partnership Deeds/Article of Association

When a partnership is to be formed, it is usual to draw up a legal document termed the deeds of partnership; although a partnership might be carried out by verbal agreement.

Partnership deeds/Article of Association should contain clauses relation to:

1) The firm's name
2) The nature of the business.
3) The address (es) with which the business will be transacted.
4) The amount of capital to be contributed by each member and interest thereon (if any).
5) The sharing formula for the profit or loss of the partnership.
6) The commencement and duration of the partnership.
7) Partner (s) salaries or remuneration, if any.
8) Loan by partner(s) to the firm and interest thereon.
9) Drawing and interest thereon.
10) The keeping of proper books, preparation of final accounts and periodic audits.
11) The adjustment and repayment of capital to a retiring partner.
12) Arbitration, in order that any partnership's dispute may be settled without litigation (going to law).

Section 24 of the partnership Act (1890) provides that in the absence of agreement by the partners to the contrary:

1. Partners are to share profit and loss equally and contribute equal amount of capital.
2. No interest is payable in respect of capital before the ascertainment of profit and no interest is to be charged on drawings.
3. 5% is to be paid to a partner who puts more money than the subscribed capital. The payment will be on the excess.
4. Any partner may take part in the management of the business. But no partner is entitled to salary for his services.
5. No partner may be introduced into the partnership without the consent of all the existing partners.
6. The partnership books are to be kept at the place of business and every partner should have access to them.

SELF ASSESSMENT EXERCISE 2

1. Discuss any 5 issues to be covered in a partnership agreement.
2. Highlight any 3 provisions of partnership act.

3.3 Liability of Partners

The partners are liable for all the debts of the firm. In the event of partner's capital not enough to save him or her, he or she has to go for his or her personal belongings. The only exception to this is where there is the provision for limited partnership and unlimited partnership.

However, in coming partner is not liable to the debts of the firm but retiring partner is liable to the extent of the debts of the firm before his retirement.

3.4Advantages of Partnership

3.4.1 Large Capital

Sole traders may combine resources together to form a partnership if the amount of capital required for the running of the type of business in mind cannot be provided by one person. Persons looking for immediate and large profits might find it impossible because of lack of large capital. To achieve their business goal; therefore, they have to bring together their capitals so as to make the large and immediate profit which they will share among themselves.

3.4.2 Experience and Ability

The experience and ability required for the progress of a business and the achievement of its goal available with one of more investors should combined with the health, vitality and wealth available with other investor(s) so as to establish a very successful partnership business. A typical example is where an old man forms partnership with a young man so that the old man's wealth of experience could be combined with the young man's health and strength for a successful partnership business.

3.4.3 Share of Ownership

Many people just prefer to share the care of ownership rather than bear all the burdens themselves. Such people will therefore decide to form a partnership instead of operating a sole proprietorship.

3.4.4 Family Relationship

By virtue of being members of same family, some sole traders prefer coming together and carrying on business activities as a family unit rather than operating differently. This will strengthen the family relationship whereas separately operating the business may lead to competition or opposition between members of the family.

3.4.5 Continuity

The continuity and enhancement of the business is more secured than in the case of single proprietorship.

SELF ASSESSMENT EXERCISE 3

1. Describe the liabilities of retiring and incoming partners.
2. Discuss any three advantages of a partnership business over a sole proprietorship business.

3.5 Types of Partnership

There are basically two (2) types of partnership: Limited and Unlimited.

3.5.1 Unlimited partnership

This is the partnership in which the partners are liable to all the debts of the business up to the extent of their personal properties. This is when the partnership is indebted or insolvent. The partners here must pay the debt even if it means selling their personal belongings like cars, houses, lands, etc in order to raise money for that purpose.

3.5.2 Limited Partnership

This is the partnership in which some partners have a limited liability and other(s) unlimited liability. Those with limited liability are liable only to the extent of the amount of capital they invested into the business if the business witnesses a failure. This means that they loss only what they already invested into the business as nobody will force them to contribute any further amount for the purpose of repaying the debt of the partnership.

The unlimited partners, on the other hand, are liable to all the debts of the partnership up to the extent of their personal belongings when the business becomes insolvent. A limited partner is registered under the provisions of the limited partnership Act (1907) and he may not take part in the management of the partnership business. There must be at least one general (unlimited) partner in a limited partnership.

SELF ASSESSMENT EXERCISE 4

1. What are the characteristics of unlimited partnership?
2. How limited is a limited partnership?

3.6 Partnership Accounts

3.6.1 Capital Account

This is the account that records the partners' capital contribution to the business. There are as many capital accounts as there are partners. There are two (2) ways of keeping the capital account: (1) fixed capital account and (2) fluctuating capital account. The first method is the most acceptable one where the capital account is left intact and current account introduced in which fluctuations in the gains and obligations of partners in the business will be recorded. The dimension of the account is like that of other accounts.

3.6.2 Drawing Account

This is the account in which the drawings made by the partners are recorded. It normally has a debit balance unlike Capital Account that has a credit balance.

3.6.3 Current Account

This is the account in which the current earnings and drawings of partner's are recorded, leaving capital account fixed. On the right of it (credit side) are recorded (1) interest on capital, (2) partners salary, (3) share of profit, and (4) interest on loan. On the left of it (debit side) are recorded (1) drawings, (2) interest on drawing, and (3) share of loss.

3.6.4 Salary Account

This is the account that records the salaries paid to active partners for their management and control of the partnership business and of course their concentration for the day-day running of the affairs of the business, sacrificing other activities that can equally fetch them money. This is credited to the current account and debited to the profit and loss appropriation account.

3.6.5 Interest on Capital

Interest is sometimes charged on capital if the work to be done by each partner is of equal value but the capital contributed is unequal. Also, if profit is to be shared equally, interest on capital has to be paid to compensate higher capital contributors.

This interest is paid out of the net profit for the year as part of appropriation. It is, therefore, treated as a deduction prior to the calculation of the "super profit" and its distribution to the partners according to the profit/loss sharing ratio. The rate of the interest is a matter for agreement between the partners. But, theoretically, it should be equal to the return which the partners would have received had they invested the capital elsewhere.

3.6.6 Interest on Drawing

Interest is sometime charged on drawings to deter the partners from taking out cash and other resources unnecessary. The interest is calculated from the date of withdrawal to the end of the financial year. The amount charged helps swell the profit divisible among the partners.

It is obviously in the best interest of the firm if cash is withdrawn by the partners in accordance with the two (2) basic principles of (a) as little as possible, and (b) as late as possible. The more cash that is left in the firm, the more expansion can be financed.

SELF ASSESSMENT EXERCISE 5

1. Differentiate between current account and capital account in a partnership business.
2. Differentiate between interest on capital and interest on drawing.

3.7 Illustrative Examples

Illustration One

Talatu Rabi and Zainab are in retail business contributing =N=100,000, =N=50,000 and =N=100,000 as capital, respectively, 5% is annually charged as interest on capital and on drawings. Zainab who is also the manager of the business is entitled to =N=60,000 as salary per annum. However, due to deteriorating health Rabi took over as from 1st July and is entitled to =N=2,500 salary per month. Rabi resigned from active partnership on the 31st October and Talatu took over as from November 1st on a salary of =N=3,000 per month.

The partners' current account is as follows:

	Talatu	**Rabi**	**Zainab**
	=N=	=N=	=N=
Current Account (Jan. 1st)	21,000	9,000Dr	19,500

Talatu and Zainab made the following drawings:

	Talatu	**Zainab**
January 1st	=N=4,500	=N=6,000
June 30th	=N=4,500	=N=10,000

The business made a =N=420,000 profit for the year ended December 31st, 1980. Profit or loss is to be shared according to the proportion of the partner's capital contribution.

You are required to prepare:

(a) Profit and Loss Appropriation Account
(b) Drawing Account
(c) Partners' Current Accounts for the year ended 31/12/1980

Solution

Talatu, Rabi and Zainab Partnership

(a) Profit and Loss Appropriation Account

	=N=	=N=		=N=	=N=	=N=
			Net Profit		420,000	
Interest on Capital:						
Zainab	5,000		Interest on Drawing:			
Rabi	2,500		1st Junuary			
Talatu	5,000		T	225		
		12,500	Z	300		
					525	

Partners' Salary:			1st July			
Zainab	30,000		T	113		
Rabi	10,000		Z	250		
Talatu	6,000	46,000			363	888
Hare of Profit:						
Z (2/5)	144,955					
R (i/5)	72,478					
T (2/5)	144,955					
		362,388			---------	
		420,888			420,888	
		======			======	

(b) Drawings Account

	Talatu N	Zainab N		Talatu N	Zainab N
Jan. 1 Cash	4,500	6,000	31/12/80 Bal. c/d	9,000	16,000
July 1st Cash	4,500	10,000			
---	9,000	16,000		9,000	16,000
1/1/81 Bal. b/d	9,000	16,000			

(C) Current Account For the year ended 31/12/80

	Talatu =N=	Rabi =N=	Zainab =N=		Talatu =N=	Rabi =N=	Zainab =N=
Bal.B/d	9,000		-	Bal. b/d21,000	-	19,500	
Drawings	9,000	-	16,000	int. on capital	5,000	2,000	5,000
Int on Dr	338	-	550	Partner's salary	6,000	10,000	30,000
Bal. c/d	167,617	75,478	182,905	share of profit	144,955	72,478	144,955
	176,955	84,478	199,455		176,955	84,478	199,455
				Bal. b/d	167,955	75,478	182,905

N:B: the rule of approximation has been applied

Illustration Two

Danwanzan and Golobo are in partnership sharing profit ad loss in the ratio of 3:2. Golobo was paid a salary of =N=5,000 on 31st August, 1991 the following balances were extracted from the partnership books:

	=N=	=N=
Premises	58,000	
Provision for Bad Debts		1,150
Furniture and Fittings	6,500	
Carriage Inwards	1,120	
Purchases and Sales	131,650	254,430
Motor Vehicles (valued @ 1/9/90)	12,840	
Discounts	1,990	1,460
Stock at 1st September, 1990	24,770	
Debtors and Creditors	28,270	15,150
Salary Golobo	5,000	
Returns	2,880	3,430
Office Salaries	25,500	
Rates and Insurance	6,420	
Electricity	1,390	
Drawings Danwanzan	4,950	
Golobo	6280	
General Expenses	5,700	
Loan from SAP-DEY		10,000
Cash at bank	7,000	
Cash at hand	390	
Motor Expenses	4,660	
Capital Accounts: Danwanzan		30,000
" " Golobo		20,000
Current Accounts: Danwanzan	1,250	
" " Golobo		880
	336,500	**336,500**
	======	======

The following information is also available:

1. Stock on hand at 31st August, 1001 is =N=25,600.
2. Depreciation furniture and fittings and motor vehicle at 20% on reducing balance method.
3. Provision for bad debts is to increased to =N=1,400
4. Rates and Insurance include =N=840 rates paid in advance and an insurance premium of =N=480 paid on 1st June, 1991 for the year 1991.
5. Interest on outside loan is at the rate of 15% and is not paid.
6. Owing for electricity at 31st August, 1991 was =N=220.
7. Relevant sections of 1890 Partnership Act are to be considered.

You are required to prepare for the partnership:

(a) Trading, Profit and Loss Accounts for the year ended 31st August, 1991

(b) Balance Sheet as at 31st August, 1991.

SOLUTION

DANWANZAN & GOLOBO PARTNERSHIP

Trading, Profit and Loss Account for the year ended 31/08/91

	=N=	=N=		=N=	=N=
Opening stock		24,770	Sales	254,430	
Add: Purchases	131,650		Less: Returns	<u>2,880</u>	
Add: Carriage	<u>1,120</u>				251,550
	132,770				
Less: Return	3,430				---------
		129,340			

C.O.G. Avail. For sales		154,110			
Less: Closing stock		<u>25,600</u>			
Cost of Goods sold		128,510			
Gross Profit c/d		<u>123,040</u>			----------
		251,550			251,550
		======			======
			G. Profit b/d		123,040
Provision for Bad debts:			Discount		1,460
New	1,400				
Less Old	<u>1,150</u>				
		250			
Discount Allowed		1,990			
Office Salaries		25,500			
Rates & Insurance	6,420				
Less Rates Prepaid	<u>840</u>				
	5,580				
Less: Ins. Prepaid (Wk 1)	<u>160</u>				
		5,420			
Electricity	1,300				
Add: Owings	<u>220</u>				
		1,640			

General Expenses		5,740	
Motor Expenses		4,600	
Interest on Loan		1,500	
Depreciation:			
F& Fittings	1,300		
Motor Vehicle	2,568		
		3,868	
		73,962	----------------
		124,500	124,500
		==========	=========

Profit & Loss Appropriation Account for the Year ended 31/08/91

	=N=	=N=		=N=	
Partners' Salary paid (Golobo)	5,000		Net Profit	73,962	
Interest on Capital (wk 2):					
Danwanzan				500	
Share of Profit:					
Danwanzan (3/5)		41,077			
Golobo (2/5)	27,385	68,462		---------	
		78,622			78,622
		=====			=====

Balance Sheet as at 31/08/91

	=N=	=N=		=N=	=N=	=N=
Capital:			FixedAssets:	Cost	Acc Depr.	NBV
Danwanzan	30,000					
Golobo	20,000		Premises	58,000		58,000
		50,000	Furn. & Fitts.	6,500	1,300	5,200
			Motor Vehicle	12,840	2,568	
10,272						
				-----------	-----------	-----------
				77,340	3,868	73,472
				========	========	========
Current Account:						
Danwanzan	35,377					
Golobo	22,085					
		57,462				
			Current Assets:			
Long-term Liability:				25,600		
			Stock			
Loan (SAP-DEY)		10,000	Debtors	28,270		
			Less: Prov. For	1,400		
			For B.D	---------		
Current liabilities:				26,870		

			Rates Prepaid	840	
Creditors	15,150		Ins. Prepaid	160	
Ins. On Loan	1,500				
Elec. Owing	220		Cash at Bank	7,000	
		16,870	Cash in Hand	390	60,860
		----------			-- ----
		134,332			134,332
		======			======

Partners' Current Account

	D/Zan N	G/ko N		D/Zan N	G/ko N
Balance b/d	1,250	-	Balance b/d	-	880
Drawings	4,950	6,180	interest on Cap	500	-
Balance c/d	35,377	22,085	share of Profit	41,077	27,385
	41,577	28,265		41,577	28,265
			Bal. b/d	35,377	22,085

Workings

1. Insurance prepaid was arrived at as follows:

Monthly premium $= \frac{480}{12} =$ N 40

4 months (Sept – Dec., 1991) payment = 40 x 4 = N 160

2. Interest on capital is based on the provision of Partnership Act provision that 5% interest, on excess capital, is to be paid to a partner who contributes amount in excess of the other(s). The excess is to be treated as loan from the partner.
3. Partner's Salary has been paid already and, so is not to be included in the current account of the partner since he has collected the amount.

4.0CONCLUSION

Partnership business is one of the three forms of businesses in any country of the world. It is more popular among professionals and vocational men and women. A partnership business is a source of income and not a unit of income, and so its profit is not taxable until it is shared amongst the partners. The accounts of a partnership business are similar to those of sole proprietorship and companies, in theory and practice, but there are specialized accounts that are normally kept by partnership businesses. This Unit highlights all the fundamental issues students should know about partnership accounting**.**

5.0SUMMARY

The Unit has introduced partnership business, the type of book keeping system to be put in place and the way to prepare final accounts of partnership businesses. Types of partnership and types of partners were made very clear, as well as liabilities of partnership and advantages of partnership business over sole proprietorship business. The Unit is a good introduction to the concept of partnership and its expected accounting system.

6.0 TUTOR-MARKED ASSIGNMENT

1. A. What is a partnership? What are the types of partnership business?

B. What are the kinds of partners that we can have?

C. What advantage has a partnership form of business over a sole proprietorship?

2. What is a partnership deed? What are the legal consequences of not-drawing such a deed?

3. Explain the following in relation to partnership accounts:

a) Partners' capital accounts.
b) Partners' drawing accounts.
c) Partner' Salary.
d) Partners' current account.

4. Tuwo and Miya are in partnership sharing profit and losses equally. Interest is allowed at 5% per annum on capital and 3% is charged as interest on drawings. The partners' account balances as at 31st December, 1995 are as follows:

	Tuwo	**Miya**
Capital accounts:	100,000	75000
Current accounts:	20,000	34000

Miya is also entitled to N17, 000 salaries per annum and on 1/1/96 withdraw N12, 000 from the business. For the year ended 31st December, 1996 the business made N15, 000 profit.

You are required to prepare:

a) Profit and loss appropriation account
b) Partners' current account for the year ended31st December, 1986.

5. Jackson and Mackson are partners, sharing profit and losses in the ratio of their capital contribution.

The following is the trial balance in the partnership books as at 31st December, 1990.

Capital Accounts at January 1	DR	CR
Jackson - -		10,000
Mackson - -		20,000
Current Accounts:		
Jackson - - -		1,250
Mackson - - -	750	
Drawings:		
Jackson - - -	4,000	
Mackson - - -	3,000	
Purchase and sales - -	33,000	141,940
Motor Van at cost	22,300	
Premises - -	80,000	
Fitting at cost - -	11,200	
Provision for Depreciation:-		
Van - - -		4,200
Fittings - -		900
Stock - -	16,700	
Cash - -	200	
Office expenses - -	1,990	
Discounts - -	850	230
Debtors and creditors - -	5,200	1,410
Bank - - -		640
Insurance - - -	110	
Carriage in ward - -	115	
Carriage out ward - -	120	
Provision for bad debts -		130
Vehicle expenses - -	1,165	
	N 180,700	N180, 700

The following information is relevant:

1. Stock at hand on 31st December, 1990 is valued at N22, 500.

2. Depreciate motor van and fittings at 10% on reducing balance methods.
3. Bad debts provision is to increase by n120
4. Insurance per annum payable amount to N35
5. 1/5 of the motor vehicle expenses is for Jackson personal use paid by the business. The amount is to be treated as drawings at 5% interest rate.
6. Mackson is entitled to N2, 600 Salary.
7. Interest on capital is to be paid at 10% per annum.
8. Interest on drawing is to be charged at 6%

Required: Trading profit and loss account for the year ended 31st December, 1990 and a balance sheet as at date.

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

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UNIT 3 ACCOUNTING FOR CHANGES IN PARTNERSHIP

CONTENTS

1.0 INTRODUCTION

A partnership business is expected to be a going concern, meaning that it should not be expected to liquidate in any foreseeable future. As it grows and prospers, it would experiences a lot of changes in its ownership, structure, financial position, etc. Adjustment has to be made in the accounts of a partnership business when more person(s) is/are to be admitted as partners or when some partner(s) died or decided to retire from the partnership. The Unit would address accounting treatments of the changes that are bound to occur as a partnership business grows or decline for whatever reason. Issues bordering on admission, resignation/ retirement, death and conversion are to be subjected to accounting treatments in a partnership business.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

appreciate the accounting treatment on admission of a new partner
understand the accounting treatment on the retirement or death of a partner
appreciate reasons why a partnership could be dissolved and the accounting treatment
appreciate the logic in the Gerner Vs Murray decided court case.

3.0 MAIN CONTENT

3.1 Changes in Partnership

3.1.1 Admission of New Partner

When it comes to admission into a partnership business, the incoming partner has to accept the conditions(s) set by the existing partners apart from any other arrangement provided by the partnership deeds as regards admission of new partner. The assets of the business are to be revalued in line with current values and the gain or loss that may arise is to be shared by the existing partners in accordance with their profit and loss sharing ratio before the admission. The share of the gain or loss is to be recorded in the current account of each partner, thereby closing the revaluation account.

SELF ASSESSMENT EXERCISE 1

1. What is the process of admitting a new partner?
2. How is revaluation account closed on admission of a new partner?

3.2 Retirement or Death of a Partner

As for death or retirement of a partner, the partnership deeds or partnership Act 1890's provisions are to be observed in addition to other conditions that might be set by the retiring partner or the trustee of the deceased partner's assets and accepted by the surviving partners. Again, revaluation has to be made of the assets of the business at the time of retirement or death of a partner so as to determine the closing capital of the retiring partner which is to be treated as agreed: Pay the partner or retain the amount as loan to the business.

After the changes on admission or death/retirement, the partnership is expected to continue as strong as possible, with the existing partners agreeing on the sharing formula of profit and loss, treatment of capital accounts, current accounts and drawings accounts, issue of partners' salaries for the general/active partners, etc. The financial position of the business, through the balance sheet, is to highlight the revaluation made to assets, the composition of capital contribution and many other charges caused by the admission or retirement/death of partner(s).

SELF ASSESSMENT EXERCISE 2

1. What are the accounting entries on retirement of a partner?
2. Differentiate between the accounting treatments of retirement and death of partners, if any.

3.3 Dissolution of Partnership

A partnership business can be dissolved at the instance of the partners, their creditors or when it is to be converted to a company.

Due to disagreement among the partners, by majority will, the partnership can be dissolved. Due to the insolvency of the business, which might be originated by some partners, the creditors may appeal for the dissolution of the partnership so that they can recover their money. When partners agree to convert the business to a company business, private or public, the partnership has to be dissolved, in the first instance, and the process of conversion followed.

Realization account has to be created in which all the assets account with the exception of cash or bank balance, are to be closed. The value realized on the assets are to be debited in the cash or bank account and all the liabilities settled from it or direct form the realization account, as the case might be. The partners' capital and current accounts are to be settled from the cashbook, which will automatically close itself. At the end of the process of dissolution, all the accounts of the business are to be closed down.

Where conversion is to be made to company business, the capital accounts of the partners are to be closed by debiting them with the equivalent value of the issued share capital of the new company.

SELF ASSESSMENT EXERCISE 3

1. Briefly discuss three reasons why a partnership business would be dissolved.
2. How is conversion of partnership to company business concluded?

3.4 Gerner Vs Murray Decided Case

Sometimes, on dissolution of partnership concern, a partner may not be able to recover his/her deficiency/insolvency. It was ruled in the Gerner V. Murray case, a British court decision that any deficiency of an insolvent partner on dissolution of a partnership business shall be borne by the solvent partners in accordance with the ratio of their last agreed capital before the dissolution. This ruling is widely accepted and is being applied in Britain and other Commonwealth countries, like Nigeria.

SELF ASSESSMENT EXERCISE 4

1. Who is an insolvent partner?
2. How should an insolvent partner be redeemed by solvent partners?

3.5 Illustrative Examples

Illustration One

Aisha, Bilkisu and Hauwa were partners in a fashion design business sharing profits and Losses in the proportion of one-half, three-tenths and one-fifth respectively.

It was decided to cease business and wind up at 31st March, 1995 and the Balance sheet as that date was as follows:

	=N=	=N=			=N=	=N=
Capital:			Fixed Assets:			
Aisha	102,780		Freehold Properties			72,560
Bilkisu	43,970		Motor Vehicle			26,130
Hauwa	16,760	163,510				
Aisha Loan Account		20,000	Current Assets:			
Sundry Creditors		52,140		Stock	59,680	
				Debtors	63,210	
				Cash	14,070	136,960
		235,650				**235,650**
		======				======

It was arranged that Aisha should take over the freehold properties at the agreed price of =N=125,000. The vehicle was sold for =N=15,270. The stock was sold for =N=49,600 and the debtors realized were =N=61,210.

The costs of winding-up amounted to =N=2,500. The liabilities were paid in full.

Required: Prepare the realization account, the cash account and the partners' capital accounts of the partnership, showing the final distribution.

SOLUTION

Realization Account

SOLUTION

Realization Account

	=N=	=N=		=N=
Freehold properties		72,560	Aisha (Freehold)	125,000
Motor Vehicle		26,130	Cash (Motor Veh)	15,270
Stock		59,680	Cash (Stock)	49,600
Debtors		63,210	Cash (Debtors)	61,210
Winding-up Exp		2,500	Gains on Realization:	
Aisha(1/2)	13,500			
Bilkisu (3/10)	8,100			
Hauwa(1/5)	5,400	27,000		----------
		251,080		251,080
		======		=======

Cash Account

	=N=		=N=
Balance c/d	14,070	Realization Exp.	2,500
Realization	15,270	Aisha (Loan)	20,000
Realization	49,600	Creditors	52,140
Realization	61,210	Bilkisu	52,070
Aisha	8,720	Hauwa	22,160
	148,870		**148,870**

Account Closed

Aisha's Loan Account

	=N=		=N=
Cash	20,000	Balance b/d	20,000
	=====		=====

Account Closed

Sundry Creditors Account

	=N=		=N=
Cash	52,140	Balance b/d	52,140
	=====		=====

Account Closed

Capital Account

	A	B	H		A	B	H
	=N=	**=N=**	**=N=**		**=N=**	**=N=**	**=N=**
Real (Fr/Hol)	125,000			Balance b/d	102,780	43,970	16,760
Cash	52,070	22,160		Gain on Real	13, 500	8,100	5,400
				Cash	8,720		
	125,000	52,070	22,160		125,000	52,070	22,160

Account Closed

1. As the business has come to an end, the accounts are all closed by the entries made on winding up.
2. Aisha has to pay =N=8,720 in order to make up the deficit shown by her capital account on winding up.
3. The gain on realization is to be shared using the profit and loss sharing formula of the winding up business.

Illustration Two

Kalala and Kalalatu are in partnership business sharing profits and losses equally. The following is the balance sheet of the business as at 31st December, 1994:

Kalala and kalalatu
Balance Sheet as at 31- 12 – 94

	=N=	=N=		=N=	=N=
Capital:			Fixed Assets:		
Kalala	180,000		Freehold property		120,000
Kalalatu	180,000	360,000	Motor vehicles		160,000
			Furniture & Fittings		60,000
					340,000
Current Account:					
Kalala	12,000		Current Assets:		
Kalalatu	7,000	19,000	Stock	64,400	
		379,000	Debtor	91,800	
			Bank	17,000	
Current Liabilities					173,200
Creditors	130,000				
Accruals	4,200	134,200		-----------	
	513,200			513,200	
	======			=====	

Additional information:

(a) On 31st December, 1994, Katutu was admitted into the partnership.
(b) Profits and losses would still be shared equally
(c) Katutu introduced a capital of =N=150,000

(d) The following assets were revalued:

Freehold property	240,000
Motor vehicles	180,000
Furniture and fittings	30,000
Stock	50,000

(e) Goodwill was valued at =N=100,000 and it is to be retained in the books.

Required:

1. Record the transactions in the books of the partnership

2. Prepare the balance sheet immediately after the admission of Katutu on 31st December, 1994.

SOLUTION

Revaluation account

	=N=		=N=
Furniture & Fittings	30,000	Freehold prop.	120,000
Stock	14,400	Motor vehicles	20,000
		Goodwill	100,000
Profit on revaluation			
Kalala	97,800		
Kalalatu	97,800		
	-----------		-----------
	240,000		240,000
	======		======

Freehold property account

	=N=		=N=
Bal. c/d	120,000	Bal. c/d	240,000
Reval.	120,000		----------
	240,000		240,000
	======		======

Motor vehicle account

	=N=		=N=
Bal. b/d	160,000	Bal. c/d	180,000
Reval.	20,000		----------
	180,000		180,000
	======		======

Furniture & Fittings Account

	=N=		=N=
Bal. b/d	60,000	Bal. c/d	30,000
		Reval.	30,000
	---------		---------
	60,000		60,000
	======		======

Stock account

	=N=		=N=
Bal. b/d	64,400	Bal. c/d	50,000
		Reval.	14,400
	64,400		64,400

Bank account

	=N=		=N=
Bal. b/d	17,000	Bal. c/d	167,000
Katutu cap	150,000		
	167,000		167,000
Bal. b/d	167,000		

Partners Capital Accounts

	Kalala	Kalalatu	Katutu		Kalala	Kalalatu	Katutu
	=N=	=N=	=N=		=N=	=N=	=N=
Bal. c/d	180,000	180,000	150,000	Bal. b/d	180,000	180,000	
				Bank	-	-	150,000
	180,000	150,000	180,000		180,000	150,000	180,000
				Bal. b/d	180,000	180,000	150,000

Partners' Current Accounts

	Kalala	Kalalatu		Kalala	Kalalatu
	=N=	=N=		=N=	=N=
Bal. c/d	109,800	104,800	Bal. b/d	12,000	7,000
			Profit on reval	97,8009	7,800
	109,800	104,800		109,800	104,800

Illustration Three

Abdul, Bola and Chukwu had been partners in business for the past twenty years. Abdul gave notice of retirement effective from 1st January, 1994. Bola and Chukwu agreed to take-over Abdul's share of the business on Abdul's terms, which were:

(a) Cash payments for half of his entitlements; and
(b) Conversion of the remaining entitlement to a loan, at the rate of 10% per annum.

The partners revalued the assets of the business, resulting in the creation of Goodwill of =N=24,000. The Balance Sheet of Abdul, Bola and Chukwu as at 31st December, 1993, was as follows:

Abdul, Bola and Chukwu
Balance Sheet As At 31 December, 1993

Capital Accounts:			Fixed Assets:		
	=N=	=N=		=N=	=N=
Abdul	600,000		Land & Buildings		603,600
Bola	600,000		Plant & Machinery		842,800
Chukwu	600,000		Office Equipment		165,200
	----------	1,800,000			
			Motor Vehicles		315,600
					1,927,200
Current Accounts:					
Abdul		53,400	Current Assets		
Bola		103,800	Stock	104,600	
Chukwu		90,600	Debtors	90,000	
		247,800			
			Cash	467,400	
				662,000	
Current Liabilities:					
Creditors		541,400			
		--------------		-----------	
		2,589,200		2,589,200	
		========		=======	

The partners were sharing profits and losses equally before and after the retirement of Abdul.

Required:

1. The necessary journal entries for the transactions.
2. Abdul's Capital Account before retirement.
3. Balance Sheet of the new partnership as at 1/1/94.

SOLUTION

(i) Journal Entries for the Transaction

	DR (N)	CR (N)
Goodwill a/c	240,000	
Revaluation a/c		240,000
Being Goodwill created due to revaluation		
Revaluation	240,000	
Abdul's Capital a/c		80,000
Bola's Capital a/c		80,000
Chukwu's Capital a/c		80,000
Beingtherevaluationprofitsharedbefore Dissolution		
Abdu's Capital a/c	366,700	
Bola's Capital a/c		183,350
Chukwu's Capital a/c		183,350
BeingcashpaymentbyBola,ChukwuforhalfofAbdul'sEntitlement		
Abdu's Capital A/c		366,700
10% loan a/c		366,700
Being half of Abdul's entitlement converted into loan		
Abdul's current a/c	53,400	
Abdul's capital a/c		53,400
BeingAbdul'scurrenta/cbalancetransferredtohisCapitala/c		

(ii) Abdul's Capital Account Before Retirement

	=N=		=N=
Bal. c/d	733,400	Bal. b/d	600,000
		Current Acct Balance	53,400
		Share of Goodwill (profit)	80,000
	---------		-----------
	733,400		733,400
	======		======
		Bal. b/d	733,400

Notes:

(i) When Abdul issued a notice of retirement, his current account is closed and the balance transferred to his capital account. His share of goodwill is also part of his net worth.

(ii) Abdul's total entitlement is therefore =N=733,400.

(iii) Half of Abdul's total entitlement is paid by Bola and Chukwu and this increased their capitals, while half is converted to a loan for the partnership.

(iii) Balance Sheet of the New Partnership as at 1/1/94

Capital:	=N=	=N=	Fixed Assets:		=N=
Bola	967,150		Land & Buildings		603,600
Chukwu	953,950		Plants & Machinery		842,800
		1,921,100			
			Office Equipment		165,200
			Motor Vehicles		315,600
Long term Liabilities:					
10% loan from Abdul		366,700			
Current Liabilities:					
Creditors		541,400	Fictitious Asset:		
			Goodwill		240,000
			Current Assets:		
			Stock	104,600	
			Debtors	90,000	
			Cash	467,400	662,000
		2,829,200			2,829,200

4.0 CONCLUSION

In the course of the survival and growth of a partnership business, a lot of changes are bound to take place resulting from the internal and external influences. These changes have to be subjected to appropriate accounting treatments for accountability and transparency to be ensured. Admission of new partners normally brings about expansion or diversification to a partnership; retirement or death of a partner usually weakens the capital base of a partnership; and conversion of a partnership to a company business usually reflects growth and development in the operations of the business and the economy as a whole. This Unit is an attempt at introducing all these issues and their accounting treatments to the students.

5.0 SUMMARY

This Unit has discussed the major issues that bring about changes in the structure and financial position of a partnership business. It has introduced the accounting treatments to be applied as the changes happen. Adequate illustrative examples were given to shade more light on the issues. These issues are: admission of new partners, retirement or death of a partner and conversion of a partnership business to a company business**.**

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss three important changes that may necessitate technical accounting treatments in the accounts of a partnership business.
2. Discuss the process of converting a partnership business to company business, indicating how accounting would come in.
3. Write short notes on the importance of the following accounts in a partnership firm:

i) Realization Account
ii) Current Account
iii) Bank Account

4. Malam Dogo and Malam Gajere were equal partners in a retail bookshop. They decided to retire and dispose of their business as on 31st December. At the close of the year their balance sheet was as follows:

	=N='000		=N='000
Dogo's capital	3,050	Lease	1,250
Gajere's capital	960	Fixtures	220
Sundry Creditors	480	Sundry Debtors	840
		Stock	2,060
	--------	Cash at Bank	120
	4,490		4,490
	=====		====

The lease and fixtures were disposed of for =N=2,700,000 and cash duly received. The books debts were collected, and realized =N=752,000. The stock was sold by auction and produced =N=1,340,000 after payment of commission and expenses. The sundry creditors were paid off, =N=38,000 being allowed for discount. The expenses of realization amounted to =N=87,000.

Required: As a book-keeper to the firm, prepare whatever accounts may be necessary to show the result of the realization and the amount received by each partner. (Adopted from Center)

5. Wayo, Lura and Hankali were in equal partnership which was terminated on 31t March, 1996. Lura and Hankali decided to continue in a new equal partnership and take over the assets and liabilities of the old firm and pay out Wayo in cash. The following was the final Balance Sheet of the old firm:

Liabilities	**=N='000**	**=N='000**	**Assets**	**=N='000**
Sundry Creditors		4,000	Plan & Machinery	4,000
Capital Accounts:			Stock-in-Trade	14,400
Wayo	10,500		Sundry Debtors	7,600
Lura	7,250		Cash at Bank	3,000
Hankali	7,250	25,000		-------
		29,000		29,000
		=====		=====

The assets were taken over at amounts as follows:

Plant and Machinery =N=3,600,000: Stock-in-Trade =N=13,800,000 and the Sundry Debtors at their books value less per cent.
Goodwill was valued at =N=10,800.

Required: You are required to give the realization account of the old firm and to prepare the balance sheet of the new firm, assuming that the amount to be paid out to Wayo was borrowed from the bank. (Adopted from Center)

7.0 REFERENCES/FURTHER READING

Damagum, Y.M. *Introduction to Financial Accounting*.

Mashwari, K. *Introduction to Financial Accounting.*

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Inanga, E.L *Principles of Accounting*.

UNIT 4 MANUFACTURING ACCOUNTS

CONTENTS

1.0 INTRODUCTION

A business entity engaged in the manufacturing of goods for sale will prepare a manufacturing account in addition to the trading, profit and loss account. The aim of preparing manufacturing account is to ascertain the cost of goods produced during the year. It is prepared in a manner to show the components of the cost of goods produced as analyzed below:

Direct Materials (that is cost of raw materials consumed)		x
Direct Labor (that is direct wages or manufacturing wages)	x	
Direct Expenses (e. g royalty payable, hire of machine, etc)	x	
Prime Cost		x
Factory/ Production Overhead Expenses		x
Cost of goods produced		x

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- understand the business setting in which the preparation of manufacturing account is required

understand the differences between a manufacturing account and a trading, profit and loss account
explain the key terminologies used in a manufacturing account
describe the principal adjustments normally being made to a manufacturing account.

3.0 MAIN CONTENT

3.1 Manufacturing Accounts

3.1.1 Inventories of a Manufacturing Concern

Manufacturing businesses have three types of inventories (stock). These are stock-in-trade, work-in progress inventory and raw material stocks. For a going concern, there is bound to be opening and closing balances of the three types of stock, two of which are to be considered in the manufacturing account before arriving at the cost of production.

SELF ASSESSMENT EXERCISE 1

1. Enumerate any three types of inventory in a manufacturing concern.
2. How should a going concern business report the three types of stock in its accounts?

3.2 Types of Costs Relevant in the Manufacturing Accounts

A cost can simply be defined as the economic resource used in production of goods or services. It can be classified into two main groups: direct costs and indirect costs. Direct costs are those that can be traced directly to a product or service. These are direct materials and direct labor costs. All other costs apart from the first two are indirect costs or manufacturing overheads.

From the above, one can conclude that manufacturing businesses need three manufacturing cost elements to produce finished products during the production operation. These are:

1. Direct Materials
2. Direct Labour
3. Manufacturing Overhead

SELF ASSESSMENT EXERCISE 2

1. What is a cost?
2. How cost is mainly classified?

3.3 Why is Cost Information Needed?

A manufacturing business must be conscious of cost information because of the following reasons:

1. Inventory Valuation

The values of inventories have to be determined before arriving at the cost of sales and the value to be included in the balance sheet in order to show a true and fair view of the financial position of the business. As costs vary from time to time, care must be taken in giving a value to the stock remaining in the store or in process.

2. Income Determination

There is the need for the knowledge of total cost to be deducted from revenue (sales) before determining the profit or loss of the business for a period.

3. Determining Selling Price

A good knowledge of the cost helps the manager in fixing the price that the products should bear as they are sold to customers.

4. Controlling Costs

By keeping the cost of production low, a manufacturer will be in a position to lower his prices and outsell his competitors. To be able to keep costs of production low, the manufacturer must first of all know what his costs are before finding ways of reducing them.

5. Financial Planning

Management requires cost information to plan for the future with desired financial goals. Cost information is necessary for a good budget to be prepared.

6. Decision Making

Management must always evaluate the costs associated with alternative courses of action before taking decision otherwise it would be putting the business in trouble. The evaluation would reveal the best option to be selected for the benefit of the business.

SELF ASSESSMENT EXERCISE 3

1. What do you understand by cost control?
2. Why should care be exercised in valuing stock?

3.4 Manufacturing Account Format

Manufacturing Account for the year ended…….

	N	N	N
Opening Stock: Raw material		XX	
Add Raw material Purchased		XX	
	XX		
Add Carriage inwards		XX	
	XX		
Less Raw material closing stock	XX		
Cost of raw material used	XX		
Factory Wages	XX		
Prime Cost of Production			XX
Manufacturing Overheads:			
Factory Expenses	XX		
Factory rent & rents	XX		
Factory electricity	XX		
Plant Repairs	XX		
Depreciation on plant	XX		
Factory insurance	XX		
Et cetra	XX		XX
			XX
Less closing work-in-progress			XX
Cost of Production			XX

NOTES:

(1) Work-in-progress difference can be entered into the account as follows:

Work-in-progress at the beginning	X
Less Work-in-progress at the end	X
	X

If the difference is positive, it is to be added to other costs and where it is negative, it should be deducted in order to arrive at the cost of manufacture.

(2) All adjustments as to prepayments, accruals or provisions are to be taken care of in the account using the same treatments as applicable to trading and profit and loss accounts.
(3) The cost of production arrived at in the manufacturing account is to be added to the cost of opening stock in the trading account.

SELF ASSESSMENT EXERCISE 4

1. How do you determine closing work-in-progress?
2. How do you arrive at "prime cost"?

3.5 Illustrative Examples

Illustration One

WAZOBIA Company ltd, based in Aba, is a manufacturer of shoes. The following data relate to the company for the year ended 31st December, 1992:

	N
Sales	800,000
Raw materials purchased	95,000
Selling and Administrative Expenses	106,000
Direct Labor	92,000
Beginning Inventories:	
Raw materials	25,000
Work-in-progress	34,000
Finished goods	41,000
Plant depreciation	112,000
Plant utilities	81,000
Indirect labor	8,800
Insurance (plant)	7,200
Plant maintenance	5,500
Ending inventories:	
Raw materials	24,000
Work-in-progress	18,000
Finished goods	51,000

Required: Prepare cost of goods manufactured statement and an income statement for the year ended 31/12/90.

SOLUTION

WAZOBIA

Manufacturing,Trading,ProfitandLossAccountfortheyearendedfor the yearended31/12/90

Opening stock (RM)	25,000	Cost of Production	418,500
Add purchases	95,000		
	120,000		
Less Closing stock	(24,000)		
Raw materials Consumed	96,000		
Direct labour	92,000		
Manufacturing Overhead:			
Plant depreciation	112,000		
Plant utilities	81,000		
Plant insurance	7,200		
Indirect labour	8,800		
Plant maintenance	5,500		
	402,500		
Add beginning W-I-P	34,000		
	436,500		
Less Ending W-I-P	(18,000)		
Cost of Production	**418,500**		**418,500**
Opening Stock	41,000	Sales	800,000
Add Cost of production	418,500		
	459,500		
Less closing stock	(51,000)		
	408,500		
Gross profit c/d	391,500		
	800,000		**800,000**
Selling and Admin. Expenses	106,000	Gross profit b/d	391,500
	285,500		
Net profit	**391,500**		**391,000**

Illustration Two

CHAKAS Ltd, a Bompai-Kano based manufacturing company had the following results for the year ended 31st December, 1985.

	N
Sales	1,790,000
Purchases of raw materials	600,000
Direct labour	700,000
Depreciation of equipment	100,000
Heating and lighting	30,000
Local authority rates	50,000
Depreciation of buildings	20,000
Telephone	20,000
Other manufacturing overheads	23,000
Other administration expenses	25,500
Other selling expenses	11,500

Overhead costs to be appropriated are as follows:

	MANUFAC	ADMIN	SELLING
Depreciation of equipment	80%	5%	15%
L. A. Rates	50%	30%	20%
Depreciation of Building	50%	35%	15%
Heating and Lighting	40%	35%	25%
Telephone	-	40%	60%

The values of stocks were as follows:

	As at 1/1/95	As at 31/12/15
Raw materials	50,000	30,000
Work-in-progress	40,000	30,000
Finished goods	160,000	180,000

Required: prepare the manufacturing, trading, and profit and loss account of Chakas Ltd for the year ended 31/12/1995.

SOLUTION

CHAKAS LTD

The apportionment of overhead costs is to be worked out first, as follows:

	MANUFAC	ADMIN	SELLING	TOTAL
Dep. of Equip.	80,000	5,000	15,000	100,000
Heating and Lighting	12,000	10,500	7,500	30,000
Local rates	25,000	15,000	10,000	50,000
Dep. of building	10,000	7,000	3,000	20,000
Telephone	-	8,000	12,000	20,000
	127,000	45,500	47,500	220,000

Manufacturing trading, profit and loss account for the year ended 31/12/1995

Opening stock (RM)	50,000	Cost of Production	1,480,000
Add purchases	600,000		
	650,000		
Less Closing stock	(30,000)		
Raw materials Consumed	620,000		
Direct labour			
Manufacturing Overheads	700,000		
Additional Overheads			
	127,000		
Add beginning W-I-P	23,000		
Less Ending W-I-P	150,000		
	40,000		
	(30,000)		
	10,000		
Cost of Production	**1,480,000**		**1,480,000**
Opening Stock	160,000	Sales	1,790,000
Add Cost of production	1,480,000		
	1,640,000		
Less closing stock	(180,000)		
Cost of goods sold	1,460,000		
Gross profit c/d	330,000		
	1,790,000		**1,790,000**
Admin. Expenses	45,500	Gross profit b/d	330,000
Additional admin. Exp.	25,500		
Selling Expenses	71,000		
Additional Selling Exp.	47,500		
Net profit	11,500		
	59,000		**330,000**
	200,000		
	330,000		

4.0 CONCLUSION

Businesses that manufacture goods for sale have to add costs of production to cost of opening stock plus other relevant costs before arriving at costs of sales. Manufacturing accounts are used to determine the cost of production of a manufacturing business concern before preparing its final accounts. This, therefore, means that the final accounts of a forward integrated business or a manufacturing business concern start from the level of manufacturing account. This Unit is introduction to the expected accounting system of a manufacturing business, including some aspects of cost accounting system to be put in place.

5.0 SUMMARY

Manufacturing business concerns need to account for three manufacturing cost elements to produce finished products during the production process. These are:

1. **Direct Materials:** These are raw materials that are directly traceable to the finished goods and, so, serving as integral parts of the finished products. For example, the cotton used for making cloth is a direct material.
2. **Direct Labor:** Compensations paid to employees whose efforts can be traced to the finished product is classified as a direct labor cost. For example, wages and salaries paid to maintenance people, supervisors, etc.
3. **Manufacturing Overhead:** All manufacturing costs except direct material cost and direct labor cost are included in the manufacturing overhead costs. They are also called factory costs or factory burden. These include such cost items as maintenance, utilities, insurance, depreciation, glue, bolts, etc.

This Unit discusses the accounting treatments of all the above, including cost of work in progress, as a manufacturing business make effort to be prudent, accountable and transparent.

6.0 TUTOR-MARKED ASSIGNMENT

1. Write an article suitable for publication in an accountancy journal on the topic: **The Necessity of Manufacturing Account for a Manufacturing Business.**

2. Write Short Notes on the Following concepts:

i) Direct Labour
ii) Overhead Cost
iii) Work in Progress

3. Discuss five reasons why cost information is needed in a manufacturing business.
4. Kandoki Plc is a manufacturing company which specializes in the making of ceramics products. The following balances were extracted from the books of the company for the manufacturing period March ending 30th, 1999.

Stocks 1st April, 1999:		
Raw materials		16,426
Finished goods		22,138
Work in Progress		18,700
Factory wages		148,720
Purchase of Raw Materials		726,114
Plant & Machinery		580,000
Repairs of plant and Machineries		18,700
Factory Insurance		28,780
Supervisors fees		48,620
Factory light & heating		16,780
Office Rent		22,100
General expenses		14,780
Discount received		8,200
Factory rent		17,380
Buildings		250,000
Factory repairs		8,700
Repairs to Buildings		20,000
Indirect Manufacturing Expenses		18,700
Stationeries		6,400
Stocks 1st April		
Finished Goods		25,000
Raw Materials		42,300
Work In Progress	18,770	

You are informed that:

(i) Manufacturing wages accrued amounted to =N=17,840

(ii) Plant and Machinery is to be depreciated using the reducing balance method. It is in its third year of use and has 2 more years to go.

(iii) Goods manufactured are transferred to the trading account at cost but the company maintains a uniform Gross Profit margin of 20% on its sales.

(iv) 10% of the Building running costs are to be charged to the Manufacturing Account.

Required:

(a) Manufacturing Account showing:

(i) Raw Materials consumed
(ii) Prime cost
(iii) Total Factory Overhead Expenses
(iv) Cost of Production

(b) Trading Account showing:

(i) Cost of Goods sold
(ii) Gross Profit
(iii) Sales

5. Bulawa and sons is a big manufacturing company based in Makurdi, Nigeria. The following is the Balance of the business as at 31st December, 1994:

	=N=	=N=
Cash	20,200	
Accounts Receivables		71,250
Inventories: Finished Goods		95,000
Work-in-progress	19,000	
Raw Materials	35,000	
Manufacturing Equipment	62,000	
Accumulated Depreciation-Equipment		12,500
Accounts Payable		22,000
Common Stock (10 per stock)		25,000
Retained Earnings		217,650
Sales		629,500
Raw materials purchased	93,900	
Freights in	1,100	
Direct Labour	250,000	
Manufacturing Rent	17,500	
Manufacturing Insurance	10,250	
Depreciation Manufacturing	5,000	

Sales Salaries	57,500	
Advertising expenses	10,500	
Administrative salaries	70,000	
Other Administrative expenses	20,300	
Finished Goods Purchases	68,150	
	---------	---------
	906,600	906,600
	=====	======

The ending inventories as on 31st December, 1994 were determined as:

	=N=
Finished Goods	98,000
Work-in-Progress	21,600
Raw materials	40,000

Required: Prepare the Manufacturing Trade and Profit and Loss Account for the year ended 31st December, 1994 and Balance Sheet as at that date.

REFERENCES/FURTHER READING

Dandago, K. I. (2002). *Financial Accounting Simplified.* (2nd ed.).Kano-Nigeria: Adamu Joji Publishers Ltd.

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UNIT 5 STOCK VALUATION METHODS

CONTENT

1.0 INTRODUCTION

Stocks (otherwise referred to as Inventories) are items of value held for use or sale by an enterprise and usually comprise raw materials and supplies used in production, work-in-progress and finished goods.

Depending on the nature of an enterprise, the value of stocks may be substantial, surpassing or only second to that of property, plant and equipment. Appropriate classification and accurate determination of the quantity and cost of stocks are necessary for proper determination of the result of the operations of an enterprise and for the presentation of current assets in its balance sheet.

The use of several methods for valuing and reporting stocks gives rise to wide differences in the results of the operations of enterprises in the same line of business. Statement of Accounting Standard (SAS) 4 seeks to narrow such differences by setting a standard for the valuation and presentation of items of stock in the context of the historical cost concept. It also deals with the valuation and presentation of items of stocks including livestock and agricultural produce. It should be noted that SAS 4 does not deal with valuation under the replacement cost accounting concept; inflation accounting concept; valuation of work-in-progress under long-term contracts; valuation of by-products and valuation of forest products.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define Stock and explain reasons why stock must be kept
- know the several methods for valuing stock
- know the recommended methods for valuing stock as described in SAS 4
- prepare store ledger card using FIFO, LIFO and Average Method
- know the disclosure requirements on stock as stated in SAS 4

3.0 MAIN CONTENT

3.1 Stock Valuation Methods

3.1.1 Types of Stock Taking

Like cash, stock can be kept for three purpose; transactionary, speculative and precautionary motives. Depending on the nature of items in stock, an organization can choose appropriate type of stock taking. Two systems of stock-taking are generally in use namely:-

(i) **Perpetual -** under this system, up-to-date records are kept of quantity and type of items of stock received, issued and on hand. This system involves continuous physical count.

ii) **Periodic -** under this system, records of quantity and type of items of stock are up-dated periodically after physical count.

SELF ASSESSMENT EXERCISE 1

1. Describe three reasons for keeping stock.
2. Differentiate between perpetual and periodic system of keeping stock.

3.2 Valuation Methods

There is a number of factors to be considered in valuing materials issued for use in the store. Where purchase price are constant over a long period and there is no variation in quantities purchased, to any extent, there would be little difficulty. But in practice, prices fluctuate due to a number of reasons: due to inflation; changes in the world commodity prices; buying from different sources; differences in quantity discounts; etc. it is clear that there may be a number of identical materials in the store bought at different prices. When one of these materials is issued, it is necessary to determine the price at which it should be charged.

The following valuation methods facilities the determination of both the quantity and the value of items of stock:-

i. **Specific Identification:** Under this method, items of stock specifically identified by particular attributes are assigned their values.

ii. **Average:** Under this method, the closing stock is assigned a value determined by a weighted average of the cost of opening stock and all acquisitions during the period. Calculation may be made on a continuous basis after each acquisition or at fixed intervals.

iii. **First In, First Out (FIFO):** This is a method of computing the value of closing stock based on the assumption that the first items in stock or acquired are the first ones used in production or consumed.

iv. **Last In, first out (LIFO):** This is a method of computing the value of closing stock based on the assumption that the last items purchased are the first issued or consumed.

v. **Standard Cost:** This is a method of computing the value of closing stock based on a predetermined cost. For this method to reflect the actual cost, a system of allocation of variances as well as review of the standard cost must be in constant use.

vi. **Base Stock:** Under this method, a minimum level of stock, carried at the historical cost of acquisition, is held at all times. However, any additions to or excesses over the base stock are carried at different bases such as FIFO, LIFO, etc.

vii. **Latest Purchase Price:** Under this method, the value of closing stock is determined by applying the cost of the latest item purchased to the number of items on hand.

viii. **Adjusted selling price (retail inventory method):** It is a method of determining the value of closing stock in which the historical cost of stock is estimated by applying the gross profit margin to the retail value of items or groups of items in stock. The amount so determined is then deducted from the retail price to arrive at the value of the stock.

The selection of each of these methods is usually guided by the principle of matching of costs with revenue. The LIFO, latest purchase price and the base stock methods of valuation do not always adequately match costs with revenue because the value of stocks reported in the balance sheet is either overstated or understated, and the profit for the period is similarly distorted. In arriving at the values of stocks, a reporting enterprise should state its accounting policies with respect to these items. Generally, stocks should be valued at the lower of cost or net realizable value.

In determining the cost of stocks under the historical cost concept, one or more of the following valuation methods should be used where appropriate:

a) First In, First Out
b) Average Cost, where it consistently approximates historical cost
c) Specific Identification
d) Standard Cost with the adjustment of cost variances described in paragraph 15(v) which brings it close to actual cost
e) The Adjusted Selling price Method where bulk purchases are made in which the costs of individual items are not readily ascertainable.

The following stock valuation methods should not be used:-

a) Latest Purchase Price
b) Last In, First Out
c) Base Stock

SELF ASSESSMENT EXERCISE 2

1. Enumerate seven methods of stock valuation and discuss any two of them.
2. Attempt an explanation as to why any two of the listed methods are not to be used.

3.3 SAS 4 Disclosure Requirements

1. Where differing methods of valuation have been adopted for different types of stocks, the amount included in the Financial Statements and the methods used in respect of each type should be stated in the notes to the accounts.
2. Enterprises should classify, in a manner appropriate to their businesses, items of stocks so as to indicate the amounts held in each category, for example, raw materials, work-in-progress, finished goods. Spare parts and stores.
3. If there is any change in the basis of stock valuation from the one used in the previous period, the change should be disclosed in accordance with the provisions of SAS I.

In this Unit, emphasis would be placed on FIFO, LIFO, Moving average and Weighted average.

SELF ASSESSMENT EXERCISE 3

1. What is your understanding about the provision of SAS 4?
2. SAS1 is about disclosure of accounting policies. How is it related to SAS 4?

3.4 Illustrative Example

ABC Ltd presents the following data obtained from its stock record:

_1/1/ opening stock	1000 units @ ₦ 3/units
1/5/ purchases	800 units @ ₦3.12/units
1/10/ purchases	1000 units @ ₦3.26/units
<u>Issues</u>	
10/2/ sales	600 units
30/6/ sales	700 units
31/10/ sales	800 units

Required: Prepare Store ledger card using FIFO, LIFO moving Average and weighted average.

SOLUTION

i) **STORE LEDGER CARD (FIFO METHOD)**

	RECIEPT			ISSUE			BALANCE	
Date	Quantity	Price	Amount	Quantity	Price	Amount	Quantity	Amount
		N:K	N:K		N:K	N:K		N:K
1-Jan							1,000	3,000
10-Feb				600	3	1,800	400	1,200
1-May	800	3.12	2496				1,200	3698

30-Jun				700*		2136	500	
1-Oct	1,000	3.26	3260				1,500	
31-Oct				800**		2538	700	

*400 x 3 = 1,200
*300 x 3.12 = <u>936</u>
<u>2,136</u>

** 500 x 3.12 =1,560
** 300 x 3.26 = <u> 978</u>
<u>2,538</u>

ii) STORE LEDGER CARD (LIFO METHOD)

	RECIEPT			ISSUE			BALANCE	
Date	Quantity	Price	Amount	Quantity	Price	Amount	Quantity	Amount
		N:K	N:K		N:K	N:K		N:K
1-Jan							1,000	3,000
10-Feb				600	3	1,800	400	1,200
1-May	800	3.12	2496				1,200	3,696
30-Jun				700	3.12	2,814	500	1,512
1-Oct	1,000	3.26	3260				1,500	4,772
31-Oct				800	3.26	2,608	700	2,164

iii) STORE LEDGER CARD (MOVING AVERAGE)

	RECIEPT			ISSUE			BALANCE		
Date	Quantity	Price	Amount	Quantity	Price	Amount	Quantity	Price	Amount
		N:K	N:K		N:K	N:K		N:K	N:K
1-Jan							1,000	3	3,000
10-Feb				600	3	1,800	400	3	1,200
1-May	800	3.12	2496				1,200	3.08	3,698
30-Jun				700	3.08	2,156	500	3.08	1,540
1-Oct	1,000	3.26	3260				1,500	3.2	4,800
31-Oct				800	3.2	2,560	700	3.2	2,240

iv) WEIGHTED AVERAGE METHOD

Material available 1,000 + 800 + 1,000 = 2,800
Total cost = N(3,000 + 2,496 +3,260) = 8,756
Quantity sold/issued = 600 + 700 + 800 = 2,100
Closing stock =2,800 – 2,100 = 700 units
Value of closing stock = 8,756/2,800 x 700 = 2,189

Note. From the above, the closing stock using LIFO Method is the lowest which is mostly the case in rising price period.

4.0 CONCLUSION

Stock constitutes one of the most important items of most business organizations, especially manufacturing organizations. Closing stock value is deducted from the cost of goods available in order to arrive at the gross profit; accurate valuation of stock influences the profit level as higher closing stock value gives higher gross profit, net profit and current asset. Thus, appropriate and accurate stock valuation is necessary in presentation of financial statements. This Unit addresses this issue in a modest way.

5.0 SUMMARY

The Unit gives highlights on the meaning of stock, purpose, types of stock taking, pricing methods, recommended methods of stock valuation and the disclosure requirements as stated by the Statement of Accounting Standard (SAS) 4 issued by the Nigerian Accounting Standards Board (NASB) in 1986. Four popular methods of valuing stock (FIFO, LIFO, Moving Average and Weighted Average) are also demonstrated to enable readers appreciate how those methods work in the determination of closing stocks values.

6.0 TUTOR-MARKED ASSESSMENT

1. From the following information you are required to determine the closing stock as at 30th April, 1993, as you prepare store ledger card using:

(i) FIFO Method
(ii) LIFO Method
(iii) Moving Average Method
(iv) Weighted Average Method

1993	purchases
Jan 1	2000 units @ N100 each
Feb 4	1500 units @ N125 each
April 21	3000 units @ N 150 each

Issues were made from the stores as follows:

Jan 10	800 units
Feb 15	1000 units
March 30	600 units
April 30	200 units

2. For the six months ended 30th June 2006, Ramat Ltd that buys a particular product from Kano and sells to customers in Dutse has

the following transactions in its records. There was an opening balance of 500 units valued at N70 each.

Date	Quantity Bought (units)	Cost per unit
Jan	500	N74
March	450	N77
May	750	N79

Date	Quantity Sold (units)	Price per unit
Feb	700	N100
April	500	N110
June	800	N115

Required:

(v) Record the above transaction on a stores ledger card using each of the following methods

(a) LIFO (b) FIFO (C) moving average

(vi) Without preparing any trading account for the period state by how much net profit under LIFO will be different from that of FIFO.

(vii) Determine the costs of goods sold during the period using period weighted average and indicate, very briefly, why the closing stock under periodic weighted average is different from that of moving average closing stock.

(viii) Determine the gross profit for the period using moving average method.

3) If purchase prices were to remain stable. FIFO, LIFO and moving average methods of determining inventories and cash flows would produce the same results. Discuss

4) To what extent can one claim that a firm that uses perpetual inventory method does not need any annual stock- taking.

5) A company has opening stock of 10 units at N20 each. Purchases during a year were made up of 100 units valued at N2, 300. Units sold during the year amounted to 75 units. A manager just back from a course “accounting for stock valuation” came up with the idea that using moving average, the cost of goods sold during the same period is 1,705 (to the nearest naira). Do you agree with him? Explain why.

7.0 REFERENCES/FURTHER READING

Dandago, K.I. and Tijjani, B. (2005). *Cost and Management Accounting*, (2nd ed.). Kano: Gidan Dabino Publishers Ltd.

Drury, C. (2000). *Management and Cost Accounting* (5th ed.). London: Thomson Learning.

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MODULE 3

UNIT 1 BRANCH ACCOUNTS

CONTENTS

1.0 INTRODUCTION

A branch can be defined as a small part of the business operating with some degree of independence. A company may have the head office in

Lagos with branches in different part of the country, for example: Kano, Abuja, Enugu, Ibadan, etc branches.

Branch accounts take into consideration the entries of transactions in the books of an organization with different branches. Since the goods are brought by the head office and sent to the branches, there must be proper accountability. The system of accounting to be employed will depend on the nature of trade, location and degree of control exercise by the head office. The head office must be duly furnished with the transactions of the business through the presentation of financial results.

This Unit concentrates on accounting treatments of the transactions involving companies with local branches only. The local branches are expected to be keeping proper records of all their transactions with different parties, not only with the head office. Some companies even request their local branches to be preparing financial statements which are to be sent to the head office for 'absorption'. But basically, branches have to regularly communicate with the head office in respect of sales of goods, related expenses, etc.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate the meaning of branch account
- explain the pricing method involving local branches
- appreciate instances where head office keeps the accounts and where the branches keep separate accounts
- understand the accounting treatment of transactions involving local branch

3.0 MAIN CONTENT

3.1 Branch Accounting System

3.1.1 Divisions of Branch Accounting

Branch accounting can be divided into two different types namely:

a) Where the Head Office keeps the accounts
b) Where the Branches keep separate accounts.

3.1.2 Where the Head Office Keeps the Accounts

The purpose behind the accounts is not merely to record transactions so that changes in assets, liabilities or capital can be calculated but also to attempt, wherever possible, to keep a check by remote control as to whether or not the firm is being defrauded of goods or cash. For a firm with different branches this is obviously of utmost importance.

The head office does all the buying and the branch simply does the selling. Here the accounting for the branches is done by the head office. This is common in large-retail chain store. The branches will receive goods from the head office at selling price and the branches, as a matter of necessity, must produce the stock or cash to cover the value of goods received. The branch manager should be mandated to forward to head office at weekly or other intervals giving details of goods received and return to head office, cash and credit sales, cash received from debtors, expenses, stock, debtors and cash at the end of the period.

3.1.3 Pricing Method

There are three different pricing methods which are used for charging goods to branches: (i) **a**t cost price; (ii) at cost plus a percentage; and (iii) **a**t selling price.

3.1.3.1 At Cost Price

The head office can charge goods out to branches at cost price. This method is good when the goods are of perishable nature or there are difficulties in determining the selling price. The exact result of operation can be ascertained when the cost price is used. It is disadvantageous because the check imposed by selling price system is not available.

3.1.3.2 At Selling Price Method

Goods can also be charged to the branch at selling price. The price will be fixed by the head office. The method is usually adopted when the goods are sold at specific price, for example proprietary articles. This method is not good for perishable goods. The advantage is that the head office can keep an effective check on the stock issued to the branch.

3.1.3.3 At Cost Plus a Percentage

This is the most effective method of charging goods to the branch. Under this pricing method, the goods will be charged to the branches at cost plus a fixed percentage. This method can provide a reasonably reliable check upon the cash and stock at the branch and the gross profit will be disclosed by the accounts. The branch stock account, goods sent to branch account and branch stock adjustments accounts will be maintained.

3.1.4 Accounting Entries

Two methods of accounting can be used:

1. Double column method otherwise called memorandum column
2. Branch adjustment method

3.1.4.1 Sending Goods at Cost Price

When a company sends goods to its branch (es) for sales using the cost price method, the accounts to be affected in the head office books and the accounting entries to be made therein are as follows:

i) Opening stock: Dr Branch Account at cost price

ii) Goods sent to Branch: Dr Branch Account
Cr Goods to Branch A/c- at cost price.

iii) Sales (credit or cash) by Branch: Dr cash/Debtors Account
Cr Branch Account, at selling price

iv) Return of goods unsold by Branch: Dr Goods to Branch Account
Cr branch Account- at cost price.

v) Return of goods by customer Dr Branch Account
Cr Debtors Account- at selling price or with the value of returns

vi) Any allowance by Head office (e.g) Dr Profit and Loss Account
on discount, damages while in transit
Cr Branch Account- with the amount or cash stolen allowed

vii) Closing stock: Cr Branch Account
(Balance c/d)- at cost price

viii) Goods stolen: Dr Profit and Loss Account
Cr Branch Account- with the value

3.1.4.2 Sending Goods at Selling Price

Using the selling price method, the following entries are to be made in the relevant accounts:

1) Opening stock: Dr Branch Account- at selling price
Cr Branch Adjustment Account-with the Mark-up

2) Goods sent to Branch: Dr Branch account- at selling Price
Cr goods to Branch Account-at Cost price
Cr Branch adjustment Account- with the Mark –up

3) Sales by Branch: Dr Cash or Debtor Account
Cr Branch Account- at selling price

4) Return by branch: Dr goods to branch Account-at cost price
Dr Branch Adjustment Account-with the Mark-up
Cr Branch Account-at selling price

5) Return by customer: Dr Branch Account
Cr Debtors Account-at selling price

6) Any allowance by the Head office: Dr Branch Adjustment Account
Cr Branch Account-with the value

7) Closing stock: Dr Branch Adjustment Account-with the Mark up
Cr Branch Account (Bal. c/d)-at Selling Price

8) Stock Surplus Dr Branch account
Cr Branch Adjustment Account- with the Value

9) Stock Deficit: Dr Stock Adjustment Account
Cr Branch Account- with the value

10) Goods stolen: Dr Branch Adjustment Account
Cr Branch Account- with the value

11) Transfer between Branches: i. Dr Receiving Branch Account
Cr Giving Branch Account- at selling price
ii. Dr Branch Adjustment Account of Giving Branch
Cr Branch Adjustment account of Receiving Branch-with the mark-up

3.1.5 Double Column Method or Memorandum Method

Under this system, there is no need to prepare separate branch stock account and branch adjustments account. The two accounts can be combined into memorandum or double column account. The branch stock account will be ruled with two columns. One column records transaction at cost and the other column at invoiced price. The entries in the invoice price form no part of the double entry, but are memoranda just for checking of stock. The following accounts are prepared:

a. Branch stock accounts with double column
b. Goods sent to branch account
c. Profit and loss account

3.1.6 Branch Adjustment Account Method

The fully integrated system introduces the idea that gross profit earned by a firm can be calculated to profit margins. Goods sent to the branch are shown at cost price in an account for that purpose, while the Branch Stock Account is shown at selling price. To show one entry at selling price and the other at cost would mean that debit amounts would not equal credit amounts, thus violating double entry principles. To rectify this Branch Adjustment Account is opened and the profit loading on the goods is recorded to preserve the quality of amounts of debit and credit entries. The Branch Stock Account by being entirely concerned with the selling prices acts as a control upon stock deficiencies, while the Branches Adjustment Accounts shows the amount of gross profit earned during the period.

SELF ASSESSMENT EXERCISE 1

1. Discuss any two pricing methods to be used where the Head Office keeps the accounts of its transactions with the branch.
2. Highlight the entries to be made where the head office send the goods to the branch at selling price.

3.2 Where the Branches Keep Separate Accounts

It is sometimes convenient that a branch should do its own accounting. The reasons may be the branch is situated far from the headquarters: the nature of the activities of the branch or that the size of the branch is such that it is economical for it to prepare its own accounts.

A branch cannot operate on its own without funds, as it is the parent firm that provides these in the first instance. The firm will want to know how much money it has invested in each branch and from this the idea of Branch and Head Office Current Accounts would come up! The relationship between the branch and the head office is seen as that of a debtor/creditor identity. The current accounts are Media where the branch is shown as debtor in the head office records, while the head office is shown as a creditor in the branch records. This is purely for expediency, because as the branch and the head office both belong to the same firm it is apparent that a firm cannot owe money to itself.

The current accounts are used for those transactions that are concerned with supplying resources to the branch or in retrieving resources from there. For such transactions full double entry records are needed both in the branch records and also in the head office records, i.e. each item will be recorded twice in each set of records. Some transactions will, however, concern the branch only, and these will merely need two entries in the branch records and none in the head office records.

SELF ASSESSMENT EXERCISE 2

1. Give any three reasons why a branch should be encouraged to operate its separate accounting system.
2. Why should a branch be treated as a debtor to its head office?

3.3 Illustrative Examples

Illustration One

MAI Enterprises operates a head office in Lagos and a branch in Ibadan. All goods are purchased by the head office and sent to Ibadan at cost plus 25%.

The following information were given for the year ended 31st December, 2008

	N
Goods sent to branch at cost	50,000
Sales on credit	35,000
Return to head office at cost	500
Cash takings remitted to head office	10,000
Stock at close at cost price	12,500
Cash takings stolen	150
Sundry expenses paid out of takings	950
Goods stolen at cost	40
Allowances off selling price	100

You are required to prepare:

a. Branch account in the head office books including other necessary accounts.

b. The profit and loss account for the year ended 31st December, 2008.

SOLUTION

The system of accounting the head office uses is the memorandum column method.

Step1. Calculate the selling price (invoiced price) using the mark-up of 25% on cost

Selling price of goods sent to branch:
Profit = Mark-up x Cost price
Profit = 25/100 x 150,000 = N12,500
Selling price = Cost price + Profit
N50,000 + 12,500 =N62,500

Selling price of returns to head office:
Mark-up x Cost price
=25/100 x500 = 125
=N500 + N125 = 625

Selling price of stock to close:
Mark-up x Cost price
=25/100 x 12,500 = N3,125
=N12,500 + N3,125 =N15,625

Selling price of goods:
Mark-up x Cost price
=25/100 x40 =N10
= N40 + 10 = N50

Step II. Prepare the branch stock account using memorandum column

Memorandum Branch Account

	Invoice price	Cost price		Invoice price	Cost price
	N	N		N	N
Goods sent to branch	62,500	50,000	Return to head office	625	500
Gross Profit		9,140	Credit sales	35,000	35,000
			Cash remitted to H/)	10,000	10,000
			Cash taken stolen	150	150
			Sundry expenses	950	950

			Goods stolen	50	40
			Allow off selling price	100	
			Stock at close	15,625	12,500
	62,500	59,140		62,500	59,140

Goods sent to branch Account (cost price)

	N	N
Return to head office		500
Branch stock account	50,000	
Transfer to H/O trading A/c	49,500	50,000
	50,000	

Profit and Loss Account

Sundry expenses	950	Gross Profit	9,140
Cash stolen	150		
Goods stolen at cost	40		
Net profit	8,000		
	9,140		**9,140**

Illustration Two

Kudi Emphasis limited has a head office in Onitsha and a branch in Jos, where all sales are on credit basis. All goods are purchased by the Head Office and invoiced to branch at cost price plus 33 1/3 %.

For the year ended 31/12/2007, the following information is available

	N
Goods sent to Jos branch (at cost to Head Office)	262,500
Sales as shown by branch reports	368,000
Goods return to Head office (at invoiced price to branch)	12,000
Cash received from branch debtors and banked for credit of head office account in Jos	315,000
Discount allowed to branch debtors	8,590
Debtors balances at branch written off	3,390
Branch Debtors on 31/12/2006	13,890
Stock of goods 31/12/2006 (at invoiced price to branch)	70,000
Stock of goods 31/12/2007 (at invoiced price to branch)	84,000

Required

Show the appropriate accounts in the books of the head Office, showing the branch gross profit for the year ended 31/12/2007. Use both cost price and selling price methods.

SOLUTION

i) Selling Price method

Kudi Emphasis Limited
Jos Branch Account

	N		N
Opening Stock	70,000	Sales	368,000
Goods to Branch	350,000	Goods Returned	12,000
Stock Surplus	44,000	Balance c/d	84,000
	464,000		464,000
Balance b/d	84,000		

Goods to Jos Branch Account

	N		N
Jos Branch (Returns)	9,000	Jos Branch	262,500
Purchases or C.O.P	253,500		
	262,500		262,500

Branch Adjustment Account

	N		N
Jos Branch (returns)	3,000	Jos Branch (Mark-up)	87,500
Balance c/d (mark-up)	21,000	Opening Stock	17,500
Gross profit	125,000	Stock surplus	44,000
	149,000		149,000
		Balance b/d	21,000

Debtors Account

	N		N
Balance b/d	13,890	Cash	315,000
Sales	368,000	Discount	8,590
		Bad debts	3,390
		Balance c/d	54,910
	381,890		**381,890**

Balance c/d	54,910

ii) **Cost Price Method**

Jos branch Account

	N		**N**
Opening stock	52,500	Sales	368,000
Goods to branch	262,500	Goods returned	9,000
Gross profit	125,000	Balance c/d	63,000
	440,000		440,000
Balance b/d	63,000		

Goods to Jos Branch Account

	N		N
Jos Branch (Returns)	9,000	Jos Branch	262,500
Purchase or (C.O.P)	253,500		
	262,500		**262,500**

Debtors Account

	N		**N**
Balance b/d	13,890	Cash	315,000
Sales	368,000	Discount	8,590
		Bad debts	3,390
		Balance c/d	54,910
	381,890		**381,890**
Balance c/d	54,910		

Notes:

1. The cost price for opening and closing stocks, and goods returned to Head Office were arrived at by dividing the figures by 133 1/3%. Cost price of opening stock for example:

$$\frac{N70{,}000}{1.3333333} = N52{,}500$$

2. The invoice price (selling price) of goods sent to Jos Branch was arrived at by adding the cost price to 33 1/3% of the cost price.

N350, 000 = N262, 500 + 0.3333333 x N262,500
=N262, 500 + N87,500

3. Cash discount and bad debts accounts were not shown simply because they are not very appropriate to branch accounting, as they are not restricted to it, and it is assumed that the corresponding accounts have been suggested by the first entries shown in Debtors' accounts.

4. The gross profit determined from the Branch Accounting will go to the credit of the Head Office Profit and Loss Account: the purchase or Cost of production figure may form part of the total purchases of the company; the closing stock on the Branch account will be added to the other closing stock of the company and appear as an additional information to its trial balance: the branch Debtors' balance will form part of the total debtors of the company and the sales made by the Branch may be added to the company's total sales.

5. Branch Accounting is a good instrument of testing the performance of Branch(es) in order to take decision as to whether to continue with the Branch(es) or not. Any branch that s not assisting towards the achievement of the objective(s) of the company should be closed down.

Illustration Three

The following transactions were recorded between JB enterprises of Port Harcourt and its branch at Maiduguri up to December, 2005:

a) Goods sent by head office to branch N60,000 of this amount, goods to the value of N4,000 had not been received by the year end
b) A sum of N15,000 had been remitted at the opening of the branch on 1/1/2005 to provide imprest
c) Cash to the amount of N42,000 had been remitted by the branch to the head office but N3,000 of this had not been received by 31st December, 2005
d) Goods returned during the year from branch to head office amounting to N2,500

You are required to prepare:

i) Maiduguri branch account in the books of the head office
ii) Head office current account in the books of Maiduguri account

SOLUTION

Head office book

Maiduguri Branch Current Account

	N		N
Cash	15,000	Returns	2,500
Goods sent	60,000	Cash	39,000
		Cash in transit	3,000
		Goods in transit	4,000
		Balance c/d	26,500
	75,000		**75,000**
Balance b/d	26,500		

Note1: Cash N39, 000 (42,000 – 3,000)

ii) Maiduguri Branch Books

Head Office Current Account

	N		N
Cash	42,000	Cash	15,000
Returns	2,500	Goods received	56,000
Balance c/d	26,500		
	71,000		**71,000**

Note: In the branch book, the value of goods received is N56, 000 because N4, 000 worth of goods are still in transit.

4.0 CONCLUSION

Growth and development is one of the objectives that almost all businesses in the world are out to achieve. As businesses expand and grow the need to keep proper record and track of transactions becomes necessary; branch account helps in achieving such objective. The need to have the knowledge of branch accounting is justified by the provision of information relating to the businesses with branches which ultimately assist in the preparation of financial statements of those entities. The book keepers and accountants of those entities should demonstrate adequate practical knowledge of branch accounting system and procedures.

5.0 SUMMARY

In this Unit, readers have been taken through the meaning of branch accounting, emphasizing on local branch where transactions take place within the same country. The divisions of branch accounting and the pricing methods are also highlighted to enable the reader understand branch accounting system and how to prepare branch accounts for proper records keeping and financial statements preparation for businesses that have local branches.

6.0 TUTOR-MARKED ASSIGNMENT

1. Sauki Limited opens a new branch on January 1, 1997. All goods are supplied by the Head Office, and the branch remits all cash received, after deductions forwages and petty expenses, to head office. Goods are invoiced to branches at cost.

The following are the transactions relating to the new branch in January:

	N	
Goods sent to branch	50,000	
Cash sales	40,000	
Credit sales	20,000	
Branch stock 31/1/97	10,000	
Cash received on account of credit sales	14,000	
Discount		500
Sundry Expenses (paid by branch)	100	
Branch rent (paid by Head Office)	400	
Wages (paid by the branch)	3,300	

Required: Prepare relevant accounts in the Head office books.

2) What is 'branch account? How are branch accounts divided?
3) What differences are there in the book-keeping systems where branches keep their own books and where head office take care of the records keeping?
4) What purpose does branch adjustment account serve?
5) Dadi Limited is a Lagos based company with a branch at Yola. Goods are sold by the branch on both cash and credit sales. All goods are, however, purchased by the head-office and sent to Branch at cost plus 25%.

For the year ended 31/12/2000, the following information is made available:

	N
Goods sent to Yola (at cost of Head office)	721,000

Sales by Branch (cash)	2,000,000
Goods returned to Head office (invoice price)	120,000
Credit sales by Branch	550,000
Cash received from Debtor	450,000
Discount allowed to Branch debtors	25,000
Bad debt written off	15,000
Stocks (at invoice price)	
1:1:2000	145,000
31:12:2000	200,000

Required: Record the above in the books of Dadi limited using:

a) Cost price method
b) Sales price method

7.0 REFERENCES/FURTHER READING

Aborode, R. (2004). *A Practical Approach to Advanced Financial Accounting.* Lagos: El-Toda Ventures.

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UNIT 2 DEPARTMENTAL ACCOUNTS

CONTENTS

1.0 INTRODUCTION

Big businesses, more especially those in the distributive activities, usually departmentalize themselves for efficiency and effectiveness of operations. Some may divide themselves into units known as subsidiaries or just branches. This Unit discusses the concept, advantages and principles of departmental accounting.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate what Departmental account is and its aim
- explain the advantages of using departmental accounts
- observe the principles of departmental account
- prepare departmental accounts for incorporation into the final accounts.

3.0 MAIN CONTENT

3.1 Departmental Accounting System

3.1.1 The Concept of Departmental Accounting

Departmentalization enables big firms to determine clearly the areas needing special attention for the achievement of overall objectives. The units or departments needing more funds and more attention than others and the one(s) contributing more toward goal attainment could be identified with good departmentalization. The purpose is basically to find out the performance and capability of the units or departments with a view to making adjustments for the achievement of the firm's objectives.

Each unit, department or subsidiary is given the free usage of some of the assets of the firm and some responsibilities which can be profit making, revenue generation or cost control. As expenses are incurred by the firm on behalf of all its departments, indirect expenses are to be apportioned to the departments, if each department is to present financial statement or if the statement is to be prepared by the company on departmental basis.

Departmental accounting is about the preparation of final accounts taking into consideration divisional performance before the overall performance. With that system of accounting, companies that departmentalize can easily reach conclusion as to their 'very well' performing units, averagely or moderately performing units. Departmental accounting aims at separating the several activities of a business in order to compare results and to assist the proprietors/owners in formulating policies. For example, laundry, catering,… can be required to prepare their accounts separately to deal with each department separately as departmental performance is evaluated.

SELF ASSESSMENT EXERCISE 1

1. What are do you understand by departmental account?
2. What are the principles and procedures of departmental accounting?

3.2 Advantages of Departmental Accounts

Some of the advantages of departmental accounts are:

1. The gross profit of each department can be ascertained.
2. Unprofitable departments will be revealed
3. The result of operations can be used to determine the remuneration of managers of each department.
4. The progress of each department can be monitored for appropriate actions to be taken.

SELF ASSESSMENT EXERCISE 2

1. Discuss any three advantages of departmental accounts.
2. What is the main difference between departmental accounting and branch accounting?

3.3 Principles of Departmental Accounting

Preparation of final accounts of a departmentalized business requires the following:

(1) that the gross profit or loss and the net profit or loss of each department be determined separately before taking the total to the appropriate account or the balance sheet of the business; and (2) that there should be some bases of apportioning gains and expenses to the departments or units of the business and that should be done as fair and equitable as possible.

Sometimes control accounts have to be resorted to in order to determine the creditors' or debtors' value to the business.

In any case, as the departmental values are shown, the total figures, for the business as a whole are to be summed up.

SELF ASSESSMENT EXERCISE 3

1. Discuss the two main issues to be taken care of in preparing final accounts of a departmentalized business.
2. Why should total figures still be shown after departmentalization?

3.4 Illustrative Examples

Illustration one

From the following Trial balance of ABG and sons prepare, in a two sided form, Departmental Trading Profit and Loss Account for the year ended 31st December, 2008, and Balance sheet as at that date.

Trial balance as at 31st December, 2008

	N	N
Stock at 1st January, 2008		
A Dept	17,000	
B Dept	14,500	
Purchases:		
A Dept	35,400	
B Dept	30,200	
Sales: A Dept.		90,800
B Dept.		81,250

Wages: A Dept.	18,200	
B Dept.	12,700	
Rent, Rate and Insurance	9,390	
Sundry Expenses	3,600	
Salaries	33,000	
Lighting and Heating	2,100	
Discount Allowed	2,220	
Discount Received		650
Advertising	3,680	
Carriage Inwards	2,340	
Furniture and Fittings	3,000	
Plant and Machinery	21,000	
Sundry Debtors	6,060	
Sundry Creditors		18,600
A – Capital		47,660
A – Drawings	14,500	
Cash at Bank	9,900	
Cash in Hand	170	
	238,960	**238,960**

The following information is also provided by ABG and sons:

1. Internal transfer of goods from A Department to B Department, N420
2. The items: Rent, Rates and Insurance: Sundry Expenses; Lighting and Heating; Salaries and Carriage inwards to be apportioned 2/3 to Department A and 1/3 to Department B
3. Advertising to be apportioned equally
4. Discount allowed and received are apportioned on the basis of Departmental sales and purchases (excluding transfers)
5. Depreciation at 10 per cent per annum on Furniture and Fittings and on plant and machinery to be charged ¾ to Department A and ¼ to B Department
6. Services rendered by B Department to A Department included wages, N500
7. The stock at 31st December,2008

Department A	N16, 740
Department B	N12, 050

There has been no addition to or sales of plant or furniture

SOLUTION

ABG and Sons

Trading, Profit and Loss Account for the Year ended 31/12/2008

	A	B	Total		A	B	Total
	N	N	N		N	N	N
Opening stock	17,000	14,500	31,500	Sales	90,800	81,250	72,050
Add: Purchases	35,400	30,200	65,600	transfers	420	500	920
Wages	18,200	12,700	30,900				
Carriage Inwards	1,560	780	2,340				
Transfers	500	420	920				
	72,660	58,600	131,260				
Less closing							
Stock	16,740	12,050	28,790				
COGS	55,920	46,550	102,470				
Gross Profit c/d	35,300	35,200	70,500				
	91,220	81,750	172,970		91,220	81,750	72,970
R R & Insur.	6,260	3,130	9,390	GP b/d	35,300	35,200	70,500
Sundry Exp.	2,400	1,200	3,600	Disc Rec	351	299	650
Salaries	22,000	11,000	33,000	Net Loss	1,221	1,221	
Lighting & H.	1,400	700					
Disc.Allowed	1,172	1,048	2,220				
Advertisement	1,840	1,840	3,680				
Depreciation	1,800	600	2,400				
Net Profit	-	15,981	15,981				
	36,872	**35,499**	**72,371**		**36,872**	**35,499**	**72,371**

Note: the net profit of the business is the sum of N15,981 positive profit from Dept B and n1,220 negative profit from Dept A Net Profit = 15,981-1,221=14,760. This suggests s that Dept B has performed better during the year.

ABG and Sons

Balance sheet as at 31st December, 2008

	N	N	Fixed Assets			
				Cost	Acc Depr	NBV
Capital- A	7,660					
Less: Drawings A	14,500			N	N	N
	33,160		Fixture & F	3,000	300	2,700
Add: Net Profit	14,760		Plant & Mach.	21,000	2,100	18,900
Closing Capital	47,920			24,000	2,400	21,600

Creditors	18,600	Current Assets:		
		Stock: A	16,740	
		B	12.050	
				28,790
		Debtors		6,060
		Bank		9,900
		Cash		170
				44,920
	66,520			**66,520**

Workings

1. Item 2 in the additional information has been complied with as follows:

Rent, Rent & Insurance (for example) = N9,390

Apportionment: Dept A (2/3) = N6,260
Dept B (1/3)= N3,130
N9,390

2. Discount Allowed = 2,220

Sales: A=90,800
B=81,250
172,050

Dept A's Share $= \frac{N90,800}{172,050} \times 2,220 = 1,172$

Dept B's Share $= \frac{N81,250}{172,050} \times 2,220 = 1,048$

2,220

3. Discount Received = 650

Purchases: A= 35,400
B= 30,200
65,600

N

Dept A's Share= $\frac{35,400}{65,600} \times 650 =$ 351

Dept A's Share $= \frac{30,200}{65,600} \times 650=$ 299

650

4. Depreciation:

F & Fitting 10% of 3,000=	300
P & Mach. 10% of 21,00=	2,100
	2,400
Dept A's Share= 3/4X2,400	1,800
Dept B's Share= 1/4X2,400	600
	2,400

5. For the internal transfers, the giving Department is to be credited and the receiving Department is to be debited with the value transferred. Items 1 and 6 are about internal transfer.

Illustration Two

From the following balances of DBT Limited you are required to prepare a departmental trading, profit and loss account for the year ended 31st December, 2007

Sales: K Dept.			30,000
L Dept.			20,000
Stock at 1st January, 2007			
K Dept		500	
L Dept		400	
Purchases:			
K Dept		23,600	
L Dept		16,400	
Commission	700		
General office salaries	1,000		
Rates		300	
Insurance		250	
Lighting		600	
Repairs		240	
Internal telephone		120	
Cleaning		20	
Sundry expenses		70	
Discount allowed		60	
Discount received		50	
Advertising		230	
Stationery		150	
Electricity		820	

Stock at 31st December, 2007

K Dept	600
L Dept	300

The total floor area occupied by each department was:

Department K (2/5)
Department L(3/5)

The following basis of apportionment should be used for the departments. Commission, advertising, discount allowed- Proportionate to sales

Discount received- proportionate to purchases
Cleaning, electricity, internal telephone, insurance- on the basis of total floor rate
All other expenses should be apportioned equally between the departments.

SOLUTION

DBT Limited
Trading, Profit and Loss Account for the Year ended 31/12/2007

	K	L	Total		K	L	Total
opening stock	500	400	900	Sales	30,000	20,000	50,000
Purchases	23,600	16400	40000				
	24,100	16,800	40900				
less Closing Stock	600	300	900				
	23,500	16,500	40000				
gross Profit	6,500	3,500	10000				
	30,000	20,000	50000		30,000	20,000	50,000
				GP b/d	6,500	3,500	10,000
Expenses				Discount Received	30	20	50
Commission (WK1)	420	280	700				
General office Salaries (WK 14)	500	500	1000				
Rates (WK 13)	150	150	300				
Insurance (WK 7)	100	150	250				
Lighting (WK 12)	300	300	600				
Repairs (WK 11)	120	120	240				
Internal telephone (WK 6)	48	72	120				
Cleaning (WK 4)	8	12	20				
Sundry expenses(WK 10)	35	35	70				
Advertising (WK 2)	138	92	230				

Discount allowed (WK 3)	36	24	60				
Stationery (WK 9)	75	75	150				
Electricity (WK 5)	328	492	820				
Net profit	4,272	1,218	5490				
	6,530	3,520	10050			3,520	10,050

Workings

1. Commission- Proportionate to sale

K = $\frac{30,000}{50,000}$ X 700 = N420

L = $\frac{20,000}{50,000}$ X 700 = N280

2. Advertising

K = $\frac{30,000}{50,000}$ X 230 = N138

L = $\frac{20,000}{50,000}$ X 230 = N92

3. Discount Allowed

K = $\frac{30,000}{50,000}$ X 60 = N36

L = $\frac{20,000}{50,000}$ X 60 = N24

Basis of Floor Area

4. Cleaning

K = 2/5 X 20 = N8

L = 3/5 X 20 = N12

5. Electricity

K = 2/5 X 820 = N328

L = 3/5 X 820 = N492

6. Internal Telephone

K = 2/5 X 120 = N48

L = 3/5 X 120 = N72

7. Insurance

K = 2/5 X 250 = N100

L = 3/5 X 250 = N150

8. Discount received: Proportionate to purchases

K = $\frac{23,600}{40,000}$ X 50 = N30

L = $\frac{16,400}{40,000}$ X 50 = N20

Equality basis:

9. Stationery

K ½ X 150 = N75

L ½ X 150 = N75

10. Sundry expenses

K	½	X	70	=	N35
L	½	X	70	=	N35

11. Repairs

K	½	X	240	=	N120
L	½	X	240	=	N120

12.Lighting

K	½	X	600	=	N300
L	½	X	600	=	N300

13.Rates

K	½	X	300	=	N150
L	½	X	300	=	N150

14. General office salaries

K	½	X	1,000	=	N500
L	½	X	1,000	=	N500

4.0 CONCLUSION

Departmental account helps in knowing the performance of each department by comparing results of the relevant departments/units within a departmentalized company; this assists the proprietors/owners to know which of the departments/units perform better than others and also helps in deciding whether or not to continue operating some departments by the company.

5.0 SUMMARY

In this Unit, students are sensitized on what departmental accounting system is all about, highlighting its concept, advantages, and principles and the procedures of departmental accounting. Departmental account helps in performance evaluation particularly in organizations having decentralized system.

6.0 TUTOR-MARKED ASSIGNMENT

1) The following balances were extracted from the books of Jonah enterprises for the year ended 31st December, 2000.

Sales:	N	N
Department A	52,000	
Department B	68,000	
Department C	30,000	150,000
Purchases:		
Department A	30,000	
Department B	45,000	
Department C	25,000	150,000

Insurance		800
Commission paid		3,500
Rent and rates		2,460
Delivery expenses		700
Administrative expenses		4,560
Discounts received		770
Salaries		18,300
Advertising		1,210
Depreciation		2,100
Opening stock:		
Department A	7,000	
Department B	12,000	
Department C	3,000	22,000
Closing stock:		
Department A	10,500	
Department B	15,000	
Department C	5,000	30,500

Additional information:
Expenses are to be apportioned on the following

a) Salaries, depreciation, rents and rates, administration expenses- equally
b) Discount received- Purchases
c) Advertising, commission and delivery expenses- Sales
d) Insurance- ratio 5:3:2 to A, B and C respectively.

Required: You are required to prepare trading, profit and loss account for the year ended 31st December, 2000.

2) HAZ and Brothers commenced business 0n 01/01/2004 with:

Stock:		
	Department X	3,000
	Department Y	5,000
Fixtures		4,000
Cash		6,000
The transactions for the year were:		
Purchases:	Department X	31,000
	Department Y	29,000
Receipt from debtors		52,000
Discount allowed to debtors		2,000
Payment to creditors		47,200
Cash sales:	Department X	3,800
	Department Y	9,200
Credit sales:	Department X	32,000
	Department Y	29,000

General expenses:	Department X	3,000
	Department Y	4,200
Unallocated expenses		4,800
Drawings		4,000
Cash in hand		5,800
Selling expenses		2,000
Cartons, etc purchases		3,200
Creditors outstanding		16,000
Stock 31/12/04:	Department X	4,200
	Department Y	5,800
Cartons on hand 31/12/04		1,100

Unallocated general expenses are to be apportioned on the basis of floor space occupied, which is in the ratio of 5:3. Selling expenses and discounts are to be apportioned on the basis of cartons sold, that is X= N60, 000, Y=N45,000

Required: Prepare:

i) Departmental Trading, Profit and Loss account
ii) Balance Sheet as at 31/12/04

3) Explain what is meant by "Departmental" account, and justify the need for the account.
4) Discuss, briefly, the advantages to be derived from a system of "departmental" accounts in developing economies.
5) Are "Departmental" accounts adopted with a view to ascertaining the gross or net profit of each department? Give reason(s) for your answer.

7.0 REFERENCES/FURTHER READING

Aborode, R. (2004). *A Practical Approach to Advanced Financial Accounting.* Lagos: El-Toda Ventures.

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UNIT 3 HIRE PURCHASE ACCOUNTS AND INSTALMENTAL PAYMENTS

CONTENTS

1.0 INTRODUCTION

Transfer of goods or assets from the owner to a user lead to various financial arrangements. The goods or assets can be transferred to the user with the arrangement that he/she would be paying rental charges monthly or annually and the ownership remains with the vendor. That is hire arrangement. The goods or assets can be sold to the user (customer) with the customer paying cash immediately. That is for cash sales (for the owner) or cash purchases (for the customer). But where the sales of the goods or assets to the customer is for other reasons than immediate cash payments, various arrangements have to be considered for the payment, which will definitely be in the future.

Payment can be made within an agreed period of time or by the acceptance of bill of exchange after which the ownership would be transferred. Secondly, the transaction may be under a credit sales arrangement whereby the goods become the property of the customer (buyer) immediately but payment for them takes place over a stipulated period. To the customer, it is called credit purchases. Thirdly, the payment can be subjected to Hire-purchase agreement.

This Unit discusses accounting treatments of hire-purchase arrangement and the payments that are to follow the various transactions under the arrangement.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- understand what hire purchase is all about
- appreciate the difference between hire purchase and credit sales
- Observe the accounting treatment with respect to hire purchase transactions
- know how to treat installment payments.

3.0 MAIN CONTENT

3.1 Accounting for Hire-Purchase Transactions

3.1.1 The Concept of Hire-Purchase and Payments under the Arrangement

When goods are bought under a hire purchase agreement, the legal title to the goods does not pass to the purchaser until every installment has been paid and a small amount, usually included in the last payment, is paid which legally exercises an option to buy the goods. Thus to buy any asset on hire purchase arrangement is legally to hire the goods until certain time, when the option can be exercised to take over the legal title to the goods. Normally the hire purchaser is not compelled to complete the transaction. If he so wishes he may return the asset without making any further installmental payment. He will, however, forfeit the right to have any of his previous installments repaid to him. On default the seller can reclaim the goods, subject to certain provisions of the Hire Purchase Acts. The repossessed items taken back into stock are not new and have to be revalued accordingly.

A variation of this procedure is that the vendor sells the goods outright to another party (e.g. finance company) which then follows the procedure above and enters into a hire purchase contract with the hire-purchaser.

SELF ASSESSMENT EXERCISE 1

1. What do you understand by the concept of hire-purchase?
2. How is installmental payment made in a hire-purchase arrangement?

3.2 Accounting Treatment

Under the hire purchase arrangement, the hire purchaser obtains possession of the goods at the outset, but the ownership remains with the vendor until the end of the hiring period. On strict legal interpretation of the facts, the vendor should not take credit for any profit and the hire-purchaser should not debit the cost of the items until the hiring period has ended.

Accounting, however, looks at the substance of the transactions rather than at its legal form. Consequently, the vendor recognizes profit as arising over the period of hire-purchase instead of at the end. Similarly, the hire-purchaser makes the necessary entry in purchases or fixed assets account at the beginning of the period and not after the option fee has been paid.

Under a hire purchase arrangement, the selling price consists of cost plus gross profit (thus giving cash price) plus a further sum of hire purchase interest by way of compensation to the vendor for the delay in receiving full payment and for the attendant risks. This is reasonable imposition because the vendor may have had to borrow money from other sources to finance the deal, on which he would pay interest. Another justification is that the money tied up in the deal might have been earning a return by being invested inside or outside the business of the vendor.

Items of hire purchase dealt with in the accounts of the businesses are invariably fixed assets. This is because acquiring trading stock and other short-term items on hire purchase would require so short a hiring period as to nullify the advantages of hire-purchase arrangement.

From the point of view of the buyer, under a hire purchases contract, the purchase price consists of two elements- the “cash” cost price and the hire purchase interest- which together makes up the hire purchase price but which must be accounted for separately. It should be noted that installmental payment can be equal or unequal and the buyer is expected to pay as at when due, failure to do so can lead to repossession of the good/item. In the balance sheet the cash price paid is treated as an asset while the cash price not paid is regarded as liability. Also future interest not paid is not regarded as liability because interest is charged to profit and loss account as it accrues.

From the point of the view of the seller under hire purchase contract, the selling price consists of three elements: (i) the purchase price and (ii) the gross profit, which together give the "cash" selling price, and (iii) the hire purchase interest which makes the latter up to the hire purchase selling price.

SELF ASSESSMENT EXERCISE 2

1. Discuss the accounting treatments on the relationship between the vendor and hire-purchaser.
2. From the point of view of the seller in a hire-purchase contract, the selling price consists of three elements. Explain them.

3.3 Journal Entries for Hire-Purchase Transactions

Different accounting journal entries apply to the vendor and to the hire-purchaser of goods, as follows:

3.3.1 Entries in the Book of the Hire Purchaser

a) Dr Assets Account XX
   To Hire purchase XX

To record the selling price of the assets hire- purchased

b) Dr Hire Purchase vendor A/c XX
   To bank/Cash Account XX

To record the deposit and installment payment

c) Dr Hire Purchase Interest A/c XX
   To Hire Purchase Vendor A/c XX

To record the interest payable to the vendor

Notes:

1. Hire purchase vendor Account is to be closed at the end of the hiring period.
2. Assets Accounts will continue to show the historical cost of the asset hire-purchased.
3. Hire purchased Interest Account is to be closed, periodically, to the profit and loss account of the hire-purchaser making the interest to form part of his business running expenses.
4. Provision for depreciation account is to be accumulating up to the end of the hiring period, and it is the accumulated depreciation that is to be taken to the balance sheet as a deductible expense out of the assets value, at the end of each accounting period.

5. The depreciation account is to be closed, periodically, to the profit and loss account of the hire purchaser.
6. The balance sheet is to show the written down value (WDV) of the asset at the end of each accounting period and is to show the value in the hire purchase account as a liability.

3.3.2 Entries in the Books of the Vendor

a) Dr Hire purchase Trading Account XX
   To general Trading account XX

To record the cost price of the asset on hire purchase contract.

b) Dr Hire purchase Debtor Account XX
   To Hire Purchase Trading A/c XX

To record the selling price of the asset, resulting to profit

c) Dr Cash/Bank Account XX
   To Hire Purchase Debtor A/c XX

To record deposit and installment payments in respect of the agreement

d) Dr hire Purchase Debtor Account XX
   To H.P interest Receivable A/c XX

To record the interest due to the hire purchase contract
Notes:

1. The vendor is to show neither the assets hire-purchased nor the depreciation on the asset in his balance sheet.
2. **Hire Purchase Trading Account**

Cost Price	XX	hire Purchase Debtor	XX
*Gross Profit	XX		
	XX		**XX**

*The Gross profit from the contract is to be credited to the profit and loss account of the vendor.

SELF ASSESSMENT EXERCISE 3

1. What are the entries to be made to record deposit and installmental payment in respect of hire-purchase agreement?
2. Why should the Vendor avoid recording the value of the assets hire-purchased in his balance sheet?

3.4 Illustrative Examples

Illustration One

A taxi-hire concern purchased vehicle on hire purchase system (from Mr. Risk) over a period of three years paying N846 down on 1st January, 1993 and 3 installments of N2,000 each on 31/12/93, 31/12/94 and 31/12/95.
The cash price of the vehicle was N6, 000, the vendor company charging interest at 8 percent per annum on outstanding balances.

Required:

Show the appropriate ledger accounts in the hire purchaser's books for the three years and how the items would appear in the balance sheet as at 31st December, 1993. Depreciation is to be at the rate of 10% per annum on the written down value of the vehicle and interest is to be calculated to the nearest naira.

SOLUTION

Five ledger accounts are to be shown: Hire Purchase Vendor Account, Asset Account, Hire Purchase Interest Account, Depreciation Account and Accumulated (or Provision For) depreciation Account. The balance sheet too is to be shown, covering the areas related to the contract.

Asset (Motor Vehicle) Account

1993	N	1993		N
1/1/ HPV	6,000	31/12/	Bal.c/d	6,000
1994		1994		
1/1/ Bal. b/d	6,000	31/12/	Bal.c/d	6,000
1995		1995		
1/1/ Bal.b/d	6,000	31/12/	Bal.c/d	6,000
1996		1996		
1/1/96 Bal. b/d	6000			

Hire Purchase Vendor (HPV) Account

1993	N	1993	N
1/1/ Cash	846	1/1/ Motor Vehicle	6,000
31/12 Cash	2,000	31/12 HP Interest	412
31/12 Bal. c/d	3,566		
	6,412		6,412
1994		1994	
31/12 Cash	2000	1/1/ Balance b/d	3,566

31/12 Bal, c/d	1851	31/12 HP Interest	
	285		
	3,851		3,851
1995		1995	
31/12 Cash	2,000	1/1 Balance b/d	1,851
		31/12 HP Interest	149
	2,000		2,000

Hire Purchase Interest Account

1993	N	1993	N
31/12 HPV	412	31/12 P&L	412
1994		1994	
31/12 HPV	285	31/12 P&L	285
1995		1995	
31/12 HPV	149	31/12 P &L	149

Depreciation Account

1993	N	1993	N
31/12 Prov. For Depr	600	31/12 P & L	600
1994		1994	
31/12 Prov. For Depr.	540	31/12 P & L	540
1995		1995	
31/12 Prov. for Depr.	486	31/12 P &L	486

Provision for Depreciation Account

1993	N	1993	N
31/12 Bal c/d	600	31/12 Depr	600
1994		1994	
31/12 Bal c/d	1,140	1/1/ Bal b/d	600
		31/12/ Depr.	540
	1,140		1,140
1995		1995	
31/12 Bal. c/d	1,626	1/1 Bal. b/d	1,140
		31/12/ Depr.	
486			
	1,626		1,626
		1996 1/1 Bal b/d	1,626

Balance Sheet (not only as at 31/12/1993

At 31/12 93:	N		N
		Motor Vehicle	6,000
		Less Prov for depr	600
	5,400		
Long term liabilities		At 31/12 94:	
At 31/12/93		Motor Vehicle	6,000
H.P vendor	3,566	Less Acc. depr	1,140
	4,860		
		At 31/12 95:	N
	N		
At 31/12/94		Motor Vehicle	6,000
H.P. vendor	1,851	Less Acc depr	1,626
	4,374		
As at 31/12/95:			
H.P Vendor	0		

Notes:

1. The HP interests were computed as follows:

1993: 8% 0f (N6,000 – N846) = N412
1994: 8% of N3,566 = N285
1995: 8% of 1,851 = N149 approximately.

Since we are to calculate the interest to the nearest naira, the decimal places for the three years' interest .32, .28 and .08 are to be summed up and approximated to one naira to be added to the interest payable in the last year of the agreement.

2. The depreciation charges were on the written down value except for the first year which was on the historical cost of the asset.

3. At the end of the hiring period, the vendor account was closed. The hire purchase interest and the depreciation accounts were closed, annually to the profit and loss account. The balance sheet has shown how the relevant items (assets, provision for depreciation and vendor accounts) would appear in it for the three years of contract.

Illustration Two

Refer to example One, if Mr. Risk himself bought the vehicle at N5, 445. Show the appropriate ledger accounts in his books being the vendor.

SOLUTION

Hire Purchase debtor Account

	N		N
1/1 93 HP Trading	6,000	1/1/ 93 Cash	846
31/12/93 HP Interest	412	31/12/93 Cash	2,000
		31/12/93 Bal. c/d	3,566
	6,412		6,412
1/1/94 Balance b/d	3,566	31/12/94 Cash	2,000
31/12/94 HP Interest	285	31/12/94 Bal. c/d	1,851
	3,851		3,851
1/1/95 Bal b/d	1,851	31/12/95 Cash	2,000
31/12/95 HP interest	149		
	2,000		2,000

Hire Purchase Trading Account

	N	N	
1/1/93 Gen Trading		5,445	1/1/93 HP Debtor
		6,000	
31/12/93 Gross Profit			555
		6,000	
		6,000	

Hire Purchase Interest receivable Account

	N		N
31/12/93 P & L	412	31/12/93 HP Debtor	412
31/12/93 P & L	285	31/12/94 HP Debtor	285
31/12/93 P & L	149	31/12/95 HP Debtor	149

Illustration Three

IAS Hotel and Catering PLC acquired two Lorries under hire purchase agreement, details of which are as follows:

Registration Number	NOL 999	NOM 767
Date of Purchase	31st May, 2006	31st Oct, 2006
Cash Price	N1, 800	N2, 400
Deposit	N312	N480
Interest deemed to accrue Evenly over the period of the Agreement	N192	N240

Both agreements provided for the payment to be made in 24 monthly installments commencing on the last day of the month following purchase.

On 1st September, 2007, vehicle NOL 999 becomes total loss. In full settlement on 20th September, 2007:

i) An insurance company paid N1, 250 under a comprehensive policy and
ii) The hire purchase company accepted N600 for the termination of the agreement.

The firm prepared accounts annually to 31st December, and to provide depreciation on a straight line basis at arate of 20 per cent per annum for motor vehicles, apportioned as from the date of purchase and up to the date of disposal. All installments were paid on the due dates. The balance on the Hire Purchase Company Account in respect of vehicle NOL 999 is to be written off.

Required:

Record these transactions in the following accounts, carrying down the balances as on 31st December, 2006 and 31st December, 2007:

a) Motor Vehicles on Hire Purchase Account
b) Provision for Depreciation Account
c) Motor Vehicle Disposal Account
d) Hire Purchase Company (Vendor) Account

SOLUTION

a) Motor Vehicle on Hire Purchase-Account

Date	Particular	NOL 999 N	NOM 767 N	Date	Particular	NOL 999 N	NOM 767 N
31/5/06	HP Vendor	1,800		31/12/06	Bal. c/d	1,800	2,400
31/10/06	HP Vendor		2,400				
		1,800	2,400			1,800	2,400
1/1/2007	Bal. b/d	1,800	2,400	20/9/07	Disposal	1,800	
				31/12/07	Bal c/d		2,400
			2,400				2,400
1/1/2008	**Bal b/d**		2,400				

b) Provision for Depreciation Account

Date	Particular	NOL 999 N	NOM 767 N	Date	Particular	NOL 999 N	NOM 767 N
31/12/07	Bal c/d	210	80	31/12/06	Depr	210	80
1/9/2007	Disposal	450		1/1/2007	Bal. b/d	210	80
31/12/07	Bal c/d		560	1/9/2007	Depr	240	
				31/12/07	Depr		480
		450	560			450	560
				1/1/2008	Bal. b/d		560

c) Motor Vehicle Account (NOL 999)

	N		N
HP Motor vehicle	1,800	Prov for Deprec.	450
HP vendor	42	Cash (Insurance)	
1,250			
		P & L	142
	1,842		**1,842**

d) Hire Purchase Company (Vendor) Account

Date	Particular	NOL 999 N	NOM 767 N	Date	Particular	NOL 999 N	NOM 767 N
31/12/06	Cash	312		31/5/06	M/Veh.	1,800	
31/10/06	Cash		480	31/10/06	M/Veh.		2,400
31/12/06	Cash (70x7)	490		31/12/06	HP Int		
31/12/06	Cash(90x2)		180		(7x8)(10x2)	56	20
31/12/06	Bal. c/d	1,054	1,760				
		1,856	2,420			1,856	2,420
1/9/2007	Cash (70x8)	560		1/1/2007	Bal.b/d	1054	1,760
20/9/07	Cash(term)	600		1/9/2007	HP Int(8x8)	64	
31/12/07	Cash(90x12)		1,080	1/9/2007	Disposal	42	
31/12/07	Bal. c/d		800	31/12/07	HP Int.		
					(10x12)		120
		1,160	1,880			1,160	1,880
				1/1/2008	Bal.b/d		800

Notes:

1. The Hire purchase interest, the installment payments, and the depreciation charges were calculated for the number of months to the end of the accounting year.

3. The Hire purchase interest on NOL 999 was calculated as follows:

4. N192/24
= N8 per month
On NOM 767 = N240/24 = N10

3) The monthly installmental payments were calculated as follows:

NOL 999 = $\frac{1,800+192-312}{24}$
= 1,680/24 = N70
NOM 999 = $\frac{2,400+240-480}{24}$
= 2,160/24 = N90

4. The depreciation accounts of the two types of Lorries are to be debited with the charges credited to the provision for depreciation account. The depreciation accounts are to be closed, annually to the profit and loss account while the provision for depreciation accounts is to be reflected in the balance sheet as deduction to the values of the Lorries.

5. The depreciation charges were calculated as follows:

NOL 999
7 months to 31/12/06: 20% of 1,800 x 7/12=N210
8 months to 31/1207: 20% of 1,800 x 8/12=N240

NOM 767
2 months to 31/12/06: 20% of 2,400 x 2/12= N80
12 months to 31/12/07: 20% of 2,400 = N480

4.0 CONCLUSION

Hire purchase is one of the methods which businesses can use to acquire assets which may either be impossible or very difficult to acquire by cash. The method is flexible as it allows the hire purchaser to pay installmentally for the hire purchase price which covers the cost price profit margin and the interest. Hire purchase, therefore, helps in improving the return of businesses since the hire purchaser uses the assets before even acquiring them.

5.0 SUMMARY

This Unit highlights on the major issues relating to hire purchase. Readers are informed on the concept of hire purchase differentiating it from cash sales and credit sales. The accounting entries in the book of both hire purchaser and vendor are also demonstrated with a view to assisting in recording entries in the books.

6.0 TUTOR-MARKED ASSIGNMENT

1a) What do you understand by the term "hire-purchase"?
b) Differentiate between hire-purchase and credit sales.
c) Differentiate between Deposit payment and installment payment.

2) Hamdala Hotel Limited acquired a bus on Hire-purchase from Suppliers PLC on 1st January, 2009. The cash price of the tractor was N80, 000. The Hire purchase agreement provided for the payment to be made in three equal installments on 31st December of each year, at an annual interest rate of 25% per annum. Depreciation of the tractor is at the rate of 15% per annum on cost.

Required:

Record the above transactions in the books of Hamdala Hotel Limited, showing the following accounts:

a) Suppliers PLC Account
b) Hire-purchase interest account
c) Profit and loss Account
d) Balance Sheet (extract)

3) HAZUB Catering are makers of delicious city cake. They acquired a new flour mixing machine from MIXERS PLC on 1st January, 2004. The hire purchase interest was agreed to be 20% per annum. Interest is to be paid as it accrues. An initial deposit of 30% of the N200, 000 cash price is to be made. Payment is to be completed on 31st December, 2008. HAZUB PLC depreciates its assets using the reducing balance method only and estimated that the mixing machine will have a scrap value of N8, 000 at the end of the useful years. HAZUB company, however, defaulted in paying the last installment and the machine was repossessed on 31st December, 2008 by MIXERS.

Required: You are required to record the above transactions in the books of:

a) HAZUB Company, showing the following accounts:

i) Mixers PLC Account
ii) Hire Purchase Interest Account

ii) Profit and Loss Account
iv) Machine Disposal Account
v) Balance Sheet abstract for the years 2004 to 2007

b) MIXERS PLC, showing the following accounts:

i) HAZUB Company
ii) Cash

4) NI'IMA Hotel and Catering PLC acquired two Lorries under hire purchase agreement, details of which are as follows:

Registration Number	KMC 555	UGG 701
Date of Purchase	31st May, 2007	31st Oct, 2007
Cash Price	N3, 600	N4, 800
Deposit	N624	N960
Interest deemed to accrue Evenly over the period of the Agreement	N384	N480

Both agreements provided for the payment to be made in 24 monthly installments commencing on the last day of the month following purchase.

On 1st September, 2008, vehicle KMC 555 becomes total loss. In full settlement on 20th September, 2008:

i) An insurance company paid N2, 500 under a comprehensive policy and
ii) The hire purchase company accepted N1, 200 for the termination of the agreement.

The firm prepared accounts annually to 31st December, and to provide depreciation on a straight line basis at a rate of 20 per cent per annum for motor vehicles, apportioned as from the date of purchase and up to the date of disposal. All installments were paid on the due dates. The balance on the Hire Purchase Company Account in respect of vehicle KMC 555 is to be written off.

Required:

Record these transactions in the following accounts, carrying down the balances as on 31st December, 2007 and 31st December, 2008:

a) Motor Vehicles on Hire Purchase Account
b) Provision for Depreciation Account

c) Motor Vehicle Disposal Account
d) Hire Purchase Company (Vendor) Account

5) On 1st January, 2002, NI'IMA Hotel and Catering PLC purchased a lorry for N218,000, and entered into a hire purchase agreement with a finance company under which he paid N44,000 as deposit, the balance, plus hire purchase charges of n24,000 being payable by equal monthly installments over a period of 3 years commencing 1st January, 2002.

Provision for depreciation is made at 20% of the cost of the lorry each year by means of depreciation Account, the Asset Account for the lorry showing the cost only.
The Hire Purchase charges are to be regarded as having accrued in equal monthly installments over the period of the agreement.

Required: You are required to prepare a schedule showing the figures appearing in NI'IMA Hotel and Catering PLC's Balance Sheet as at 31st March, 2002, 2003, 2004, 2005, 2006, and 2007 for:

a) The Lorry Account
b) Lorry Depreciation Account
c) Hire Purchase Account
d) Hire Purchase Interest charged in the Profit and Loss Account for the year ending on those dates.

7.0 REFERENCES/FURTHER READING

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UNIT 4 SALES AND PURCHASE OF BUSINESSES (BUSINESS COMBINATION)

CONTENTS

1.0 INTRODUCTION

The term “business combination” is used to describe an arrangement where two or more businesses owned are operated as separate entities join together to become a single entity under a single ownership. The implication of this is that the separate businesses will discontinue their ownership and come under a single ownership. Business combination can be found in sole- proprietorship, partnership and in companies’ business arrangements. The scope of this unit covers companies’ amalgamation and absorption. Business combination can, therefore, take two forms: i) Amalgamation and ii) Absorption.

Sometimes companies are dissolved due to financial problems and after several adjustments re-register to carry on normal business. This process is called reconstruction or reorganization. This exercise is undertaken by those companies which incur heavy losses for long time and where unable to write off such losses, or companies having substantial fictitious assets such as goodwill, preliminary expenses, profit and loss account debit balances, etc.

This Unit discusses the accounting treatments of the issues raised here with a view to demonstrating the accounting presence in all types of transactions.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate the meaning of business combination
- understand reason(s) why businesses combine to produce a stronger entity
- explain the major types of business combination
- appreciate the accounting entries for business combination.

3.0 MAIN CONTENT

3.1 Accounting for Business Combination

3.1.1 Amalgamation

This refers to a situation where companies that exist separately under different ownership combine to form a new one. The major feature of this arrangement is that the two businesses that amalgamate will no longer exist, that is, they are liquidated. For example, Company A may combine with company B to form Company AB which is expected to be larger and more viable. Ideally suited to this method are similar sized businesses operating on a relatively small scale.

Reasons/benefits of amalgamation include:

a) The desire to gain larger share of the market.
b) The desire to attain synergy.
c) The desire to establish a solid capital base.
d) The desire to provide efficient customer service.
e) The desire to acquire a base adequately for raw materials sourcing in the case of a manufacturing firm.
f) The desire to be able to challenge a major competition.
g) In order to meet legal and statutory requirements.
h) To enjoy political policies during a period.

When businesses amalgamate, two major accounting problems arise, namely: i) those concerned with closing the books of the discontinuing businesses which are being wound up; and ii) those concerned with the establishment of new business.

3.1.1.1 Closing the Books of the Discontinuing Companies

To close the books of the discontinuing companies, the following ledger accounts are necessary:

i) Realization account
ii) New company account
iii) Sundry members account
iv) Each liability account, e.g creditors, liquidation expenses payable/creditors for dissolution expenses, loan or debenture account
v) Bank account
vi) Component of purchase consideration, e.g ordinary shares issued, preference share issued, debenture stock issued and cash paid.

3.1.1.2 Realization Account

This is the account in which profit or loss on the dissolution of a discontinuing company is determined. It is usually prepared in a columnar form. The number of columns will depend on the number of companies amalgamating.

The following transactions or events are usually accounted for in the realization account:

a. Debit all assets at book value to realization account
b. Determine the purchase consideration and credit it to the realization account
c. Amalgamation, dissolution or liquidation expenses should be debited to realization account. This will in effect reduce the profit on realization or increase the loss on realization
d. Profit or loss on realization is determined, that is, the balance on realization account is transferred to the sundry members account (ordinary).

3.1.1.3 New Company Account

This is the account where the purchase consideration and related transactions are treated. The purchase consideration, when agreed, is debited to this account (remember that the credit entry goes to realization account) while transaction relating to the purchase consideration are credited to the account when settlement of the agreed purchase consideration is made. The account can, therefore, be regarded as a "self balancing" account.

SELF ASSESSMENT EXERCISE 1

1. Discuss any four benefits of amalgamation in business combination process.
2. Mention six accounts to be created on closing the books of discontinuing businesses, and explain any two.

3.2Specific Accounts Needed

3.2.1 Sundry Members Account (Ordinary and Preference)

The following accounting transactions are affected in the sundry members account:

a. Transfer the components of the shareholders fund (e.g. ordinary shares, preference shares, and reserves) to the account by debiting each of the components of the shareholders fund and credit sundry members account
b. The profit/loss on realization is also transferred to this account.
c. Each of the components of purchase consideration, when settlement is effected as agreed, including cash, are transferred to this account and the account will automatically balance.

This account is similar to the partners' account in the amalgamation of partnership.

It should be noted, however, that if there is more than one class of preference shares, the classes must be separated and different ledger accounts opened for each class. For example, if in the balance sheet there are 10% preference shares, 8% cumulative preference shares and 5% redeemable preference shares, these are three different classes of preference shares, therefore, three different sundry members preference accounts must be opened to present each of them separately.

3.2.2 Liability Accounts

Balances on each liability account such as trade creditors and long term loans/debentures should be brought down in their respective ledger accounts. It should be noted that each liability is either settled by the discontinuing business or taken over by the new business.

Where the liability is settled by the discontinuing business, the liability account is debited and cash/bank account credited. However, where the liability is taken over by the new business, it becomes part of the purchase consideration and is treated as follows:

Dr. Liability account
Cr. New Company account
Cr. Discount Received from Creditors, where the liability has been settled at less than the book value and this is regarded as full and final settlement. It means the discount has been received from creditors. The accounting entries are:
Dr. Liability account
Cr. Realization Account

Liabilities settled above the book value

Where a liability has been settled above its book value, the difference between the book value and the takeover value is debited to realization account. This implies that a loss was incurred in settlement of liability. The accounting entries will be:

Dr – Realization account with the difference
Cr- liability account and amount paid

SELF ASSESSMENT EXERCISE 2

1. Discuss any two transactions that are related to sundry members' accounts.
2. How are liabilities accounts treated in the books of a discontinuing business?

3.3 Purchase Consideration

This is the aggregate amount, which the new company is to pay the owners (that is the stakeholders) of the discontinuing business and creditors.

The components of purchase consideration in amalgamation of companies may be some or all of the following:

i) Ordinary shares issued by new company
ii) Preference shares issued by new company
iii) Debenture stock issued by new company
iv) Cash given by the new company
v) Liabilities of the old companies taken over by the new company

Where liabilities are taken over, they form part of the purchase consideration. Such liabilities are debited to the liabilities account and credited to the new company account.

Ledger accounts are opened for each of the components of purchase consideration.

On settlement of the purchase consideration as agreed, each of the components of the purchase consideration is debited while the new company account is credited.

On distribution to the owners of discontinuing businesses, the sundry members account is debited and each of the components of purchase consideration credited.

The accounting entries necessary to close the book of discontinuing businesses being liquidated are summarized below:

Dr- Realization Account
Cr-individual assets Account

Event: the book value of the asset taken over by the company at the date of cessation
Dr- Individual Liability Account
Cr- New Company Account

Event: liabilities taken over by the new company at the date of cessation. (If part of purchase consideration)
Dr-New company's Account
Cr- Realization Account

Event: Agreed purchase consideration (including liabilities taken over)
Dr- Realization Account
Cr-Realization expenses payable account/creditors' account for realization expenses

Event: Realization expenses.
Dr - Liquidation expenses payable account
Cr-Bank account

Event: portion of the realization expenses paid by the company being discontinued
Dr- Creditors account
Cr- Realization account

Event: Discount received from creditors
Dr-Realization account
Cr-Sundry shareholders and debenture holders account.

Event: Profit on realization (this is to be derived)
Dr-Share capital reserves and debenture account
Cr-Sundry shareholders and debenture holders account

Event: Transfer of balances on share capital, reserves and debentures account
Dr-Bank and/or shares and/or debentures in new company account
Cr-New company's account

Event: settlement of the agreed purchase consideration by the new company
Dr-Creditors account
Cr-Bank account

Event: Settlement of liabilities not taken over by the new company
Dr-bank account
Cr creditors account
.
Dr- bank and/ or shares and/ or debentures in the New Company Account
Cr-Sundry shareholders and debenture holders account

Event: distribution of balances
Dr- Preference dividends in arrears
Cr-Sundry members' preference

Event: Arrears of pref. dividend included in the balance sheet as a liability
Dr**-** Retained profit or any other revenue reserve
Cr-Sundry members' preference account

Event: Cumulative preference dividend in arrears but not included in the balance sheet and not to be forfeited.
Dr-Retained profit or any
Cr- Debenture stock

Event: Arrears of debenture interest if any
Dr-Proposed dividend account
Cr-Sundry members' shares account

Event: Ordinary dividend included in the balance sheet.

SELF ASSESSMENT EXERCISE 2

1. Describe any four components of purchase consideration in amalgamation of companies.
2. What are the necessary entries for closing the fixed assets and liabilities accounts of a liquidating business?

3.4 Establishment of the New Company and Accounting Entries

The accounting entries in the books of the new company can be divided into two:

i) The amalgamation journal
ii) The balance sheet after amalgamation.

3.4.1 Amalgamation Journal

This is a composite journal which is prepared to reflect the assets and liabilities taken over as well as goodwill or capital reserve on amalgamation.

On the debit side of the journal are all tangible assets taken over at revaluation value or taken over value. However, if the takeover values are not given, it is assumed that the assets are taken over at book values. The takeover value will only be used when such assets are not revalued. If revalued, the revaluation value will be used instead of the takeover value.

On the credit side of the journal, are all the components of purchase consideration (including liabilities taken over) as contained on the credit side of the new company account in the book of discontinuing businesses.

The difference between the debit and the credit entries made in the journal represents goodwill or capital reserve. If the balancing figure on the journal is an asset (i.e debit balance), it is referred to as goodwill. If it is a claim over the assets (i.e. credit balance), it is referred to as capital reserve.

Proforma of the Amalgamation Journal

	Dr	Cr
	N	N
Land & Building		X
Plant & Machinery	X	
Furniture & Fitting	X	
Motor Vehicles	X	
Stocks	X	
Debtors	X	
Goodwill (balancing figure)	X	
Creditors		X
Bank overdraft		X
3% debenture		X
Ordinary shares		X
Preference shares		X
	X	**X**

Being assets and liabilities taken over on amalgamation of A ltd and B ltd to form AB Ltd.

NOTE:

It is instructive that the amounts of each of the assets mentioned above are combined amount of the takeover values of all the companies that amalgamated. Also, the amounts on the credit side of the journal are combined figures of each item on the new company account as they appeared in the book of the discontinuing company.

It should also be noted that the journal is a composite journal. The corresponding debit and credit entry is the purchase of business account or vendor account.

All transactions after amalgamation in the book of the new company must be journalized by using a simple journal. Such transactions may include fresh issue at or above the nominal value.

Where fresh issues of shares are made for cash, the accounting entries will be:

Dr-Bank/Cash account
Cr-ordinary share capital account with the nominal value
Cr-share premium account with the premium

After this, the balance sheet of the new company can be prepared.

3.4.2 The Balance Sheet of the New Company

The balance sheet of the new company, after amalgamation is prepared using the figures from the opening journal subject to adjustments for transactions after amalgamation as enumerated above.

SELF ASSESSMENT EXERCISE 3

1. Differentiate between goodwill and capital reserve.
2. What are the accounting entries to be made where fresh issues of shares are made for cash?

3.5 Absorption, Takeover or Purchase of Business

Absorption involves a situation whereby a company takes over another company. The company that is taken over (i.e. absorbed company) will lose its identity (i.e. wound up) while the assets and liabilities of the absorbing company will increase after the absorption. For example, A ltd can purchase or take over B ltd to form a bigger A ltd.

This means that unlike amalgamation in which all the amalgamating businesses lose their identities, only one (i.e the absorbed company) loses its identity in the case of absorption.

The amalgamation method is employed where relatively small scaled businesses are concerned. Where this is not the case and large, complex businesses are involved, a holding company is usually established to acquire all, or majority holding, of voting shares of those companies which then continue in existence. But as subsidiaries of the holding company .the acquisition of controlling interest can also arise without the establishment of a holding company for the purpose, when an existing dominant company acquires a controlling interest in one or more other companies.

When a business takes over another business, two major problems arise. These are:

i) Those concern with the closing the books of the discontinuing business which is being wound up.
ii) Those concern with the updating the records of the continuing business.

3.5.1 Closing the Books of the Discontinuing Company

To close the books of the discontinuing company, the following ledger accounts are necessary:

i) Realization account
ii) Absorbing company's account
iii) Sundry members account
iv) Each liability account
v) Bank account
vi) Account for each component of purchase consideration

The operation of each of the ledger accounts mentioned above are similar to those of amalgamation except that all entries that are passed into new company's account in amalgamation go to absorbing company account.

On essence, profit or loss on realization is determined on realization account and transferred to sundry members' ordinary account.

All liabilities are either paid off by the absorbed company or taken over by the absorbing company.

Each component of purchase consideration is transferred to sundry members ordinary or preference account.

All adjustments are made to bank account before the balance is transferred to realization account (i.e. bank/cash taken over by absorbing company).

It should be noted that where bank is not taken over, the balance should be debited to sundry members or ordinary account.

3.5.2 Accounting Entries in the Books of Absorbing or Continuing Business

The continuing business has been in existence before it took over the absorbed business. Therefore, its assets and liabilities will increase in proportion to the assets and liabilities taken over.

The account of its assets, liabilities and shareholders' fund must be brought down in their respective ledger accounts. The records to incorporate the activities of the business taken over will be divided into two, as follows:

a) The absorbing journal
b) Recording from the absorbing journal to the existing relevant ledger account.

3.5.3 The Absorption Journal

The journal is a composite journal which is prepared to reflect the assets and liabilities taken over and determine the goodwill or capital reserve.

On the debit side of the journals are all tangible assets taken over at revaluation value or takeover value when such assets are not revalued.

On the credit side of the journal are all the purchase considerations (including liabilities taken over) as stated on the credit side of the absorbing company account in the book of the discontinuing business. The difference between the debit and credit sides of the journal represent goodwill or capital reserve.

In essence, the journal is not different from the amalgamation journal except that in amalgamation, the amounts on the journals are combined amounts of the companies involved I the amalgamation, while in absorption it is only the amounts of the dissolved (absorbed) company. The formats of the two journals are similar.

3.5.4 Recording Items from the Absorption Journal to the Ledger Account

The ledger accounts opened for assets and claims over assets are scrutinized. Items in the absorbing journal and other journals are then transferred to the relevant ledger accounts with each of them having the narration ‘vendor’. Assets from the journal will be posted to the debit side of the relevant asset account while liabilities and claims over the assets from the journal will be posted to the credit side of each relevant ledger account.

After this, the ledger accounts are balanced and the balance sheet for the continuing business can be prepared.

SELF ASSESSMENT EXERCISE 4

58. What do you understand by the term absorption in business combination process?
59. Discuss the process of recording items from the absorption journal to the relevant ledger accounts.

3.6 Illustrative Examples

Illustration one

The Moon Company limited and the rising star company Limited have agreed to amalgamate. A new company Sunshine Company Limited has been formed to take over the combined concerns on 31st January, 2006. The Balance sheets of the two companies as at 31st December, 2005 were as follows:

The Moon Company Limited

	N		N
Liabilities		**Assets:**	
Issued and paid capital:		Buildings	50,000
100,000 ordinary shares		Machinery	
20,000 of N1 each	100,000	Stock	26,000
15% Debentures	2,000	Debtors	12,000
Creditors	6,000	Cash	5,000
Unappropriated profit	5,000		
	113,000		**113,000**

The Rising Star Company Limited

	N		N
Liabilities:		**Assets:**	
Issued and paid up capital:		Buildings	30,000
5,000 ordinary shares		Machinery	25,000
of N10 each	50,000	Goodwill	5,000
Creditors	3,000	Stock	3,000
Bill payable	2,000	Debtors	2,000
General reserves	5,000		
Retained Earnings	5,000		
	65,000		**65,000**

The new company (Sunshine) will take over the assets and liabilities as follows:

Moon

All assets on book value, except cash: buildings and machinery to be depreciated at the rate of 10%. Debentures will be redeemed by the Moon Company Limited

Rising Star

All assets at book value except goodwill, and stock and all liabilities, except creditors will be satisfied by paying in the form of stock-in-trade by the Rising Star Company.

The new company will pay purchase consideration as follows:

1. To the Moon Company Limited:

a) 7,000 ordinary shares of N10 each
b) 2,000 preference shares of N10 each

2. To the Rising Star Company Limited:

a) 5,000 ordinary shares of N10 each
b) 2,000 preference shares of N10 each

Required:

1. Realization Accounts of moon and Rising Star Companies.
2. Shareholders' Accounts of Moon and Rising star Companies.
3. Cash account of moon Company.
4. Goodwill Account of Rising Star Company.
5. Balance Sheet of Sunshine Company Limited as at 31st January, 2006.

SOLUTION

Workings

The net assets and the purchase consideration of the two old companies have to be determined and compared for identification of goodwill or capital reserve.

Moon Company

		N
Assets		
Buildings	50,000-5,000(depreciation)	45,000
Machinery	20,000-2000(depreciation)	18,000
Stock		26,000
Debtors		12,000
		101,000
Less Creditors		6,000
Net Assets		95,000

Less purchase consideration (shares issued):

7,000 ordinary shares	N10 =	70,000
2,000 pref. share	N10=	20,000

90,000
Capital Reserve
5,000

Rising Star Company

Assets:

Buildings
30,000
Machinery
25,000
Debtors
2,000

57,000
Less bills payable
2,000
Net Assets
55,000
Less purchase consideration (shares issued):

5,000 ordinary shares	N10 =	50,000
2,000 pref. shares	N10 =	20,000

70,000
Goodwill
15,000

Accounts for Moon Company

Realization Account

	N		N
Buildings	50,000	Creditors	6,000
Machinery	20,000	Sunshine (P.C)	90,000
Stock	26,000	S/holders A/c (loss)	12,000
Debtors	12,000		
	108,000		**108,000**

Sunshine Company

	N		N
Realization	90,000	Shareholders (shares)	90,000

Shareholders Account

	N		N
Realization (loss)	12,000	Ordinary shares	100,000
Sunshine (shares)	90,000	Profit and loss	5,000
Cash	3,000		

	105,000		**105,000**

Cash Account

	N		N
Opening balance	5,000	Debentures (15%)	2,000
		Shareholders	3,000
	5,000		5,000

Accounts for Rising Star Company
Realization Account

	N		N
Building	30,000	Bills payable	2,000
Machinery	25,000	Sunshine (P.C)	70,000
Debtors	2,000		
Shareholders (profit)	15,000		
	72,000		**72,000**

Sunshine Company Account

	N		**N**
Realization	70,000	Shareholders	70,000

Shareholders Account

	N		**N**
Sunshine (shares)	70,000	Ordinary shares	50,000
Goodwill	5,000	General Reserves	5,000
		Retained Earnings	5,000
		Realization (profit)	15,000
	75,000		**75,000**

Balance Sheet of Sunshine Company Limited as at 31st January, 2006

	N		N	N
Liabilities		**Fixed Assets:**		
Issued Capital:				
12,000 ord. shares of N10 each	120,000	Buildings:		
4,000 pref. shares of N10 each	40,000	Moon	45,000	
		Star	30,000	
Reserve:				75,000
Capital Reserve (Moon)	5,000	Machinery:		
Current Liabilities		Moon	18,000	
Creditors (Moon)	6,000	Star	25,000	
Bill payable (Star)	2,000			43,000
		Current Assets:		

	Stock (Moon)		26,000
	Debtors:		
	Moon	12,000	
	Star	2,000	
			14,000
	Fictitious Asset:		
	Goodwill (Star)		15,000
173,000			**173,000**

Notes:

1. **Goodwill (Star)** N15, 000 less Capital Reserve (Moon) N5, 000 = N10,000 can be reflected as starting goodwill value for Sunshine. If that is done, the Balance Sheet totals would be N168, 000.
2. Total figures for individual liabilities and assets can be shown without any mention of the old companies in the above balance sheet.

Illustration Two

The Middle Belt Chemical Company Limited sells its business to the Northern Chemical Company Limited as on 31st December, 2008. It balance sheet on that date was as under.

Liabilities	N	Assets	N
Issued and paid up capital:		Goodwill	50,000
2,000 ord. shares of N100 each	200,000	Buildings	233,000
10% Debentures	100,000	Stock	35,000
Creditors	30,000	Bill Receivable	4,500
Reserve Fund	50,000	Debtors	27,500
P & L Account	20,000	Cash	50,000
	400,000		**400,000**

The Northern Chemical Company agreed to take over the assets at 10% less than the book values (excluding cash and goodwill): to pay N75,000 for goodwill and to take over debentures. The purchase consideration was to be discharge by the allotment to the Middle Belt Chemical Company Limited of 1,500 shares of N100 each at a premium of N10 per share and the balance in cash. The cost of liquidation amounted to N3, 000 paid by Middle Belt Company.

Required: Show ledger accounts in the books of Middle Belt Company Limited, and journal entries in the books of Northern Chemical Company.

SOLUTION

The purchase consideration will be determined as follows:

Assets N

Goodwill		75,000
Buildings	233,000- 10% of 233,000	209,700
Stock	35,000- 10% of 35,000	31,500
Bill Receivable	4,500- 10% of 4,500	4,050
Debtors	27,500-10% of 27,500	24,750
		345,000
Less Liabilities (Debentures)		100,000
Purchase consideration		**245,000**

Realization Account

	N		N
Goodwill	50,000	Debentures	100,000
Buildings	233,000	N.C.C Ltd (P.C)	245,000
Stock	35,000	S/holders	8,000
Bill Receivable	4,500		
Debtors	27,500		
Cash (Liquidation cost)	3,000		
	353,000		**353,000**

Northern Chemical Company Limited Account

	N		N
Realization	245,000	Shareholders (shares)	165,000
		Cash	80,000
	245,000		**245,000**

Note: The shares allotable to shareholders of Middle Belt Company were arrived as follows:

	N
1,500 shares of N100 each	150,000
Share premium 1,500 x N10	15,000
	165,000
Cash	80,000
Purchase consideration	**245,000**

Cash Account

	N		N
Balance b/d	50,000	Realization (expenses)	3,000
N.C.C. Ltd	80,000	Creditors	30,000
		M.B.C. Shareholders	97,000
	130,000		**130,000**

Middle Belt Company Shareholders Account

	N		N
Realization (Loss)	8,000	Share Capital	200,000

Shares (of N.C.C)	165,000	Reserve Fund	50,000
Cash (balance transferred)	97,000	P & L Account	20,000
	270,000		**270,000**

B. Journal Entries in the books of Northern Chemical Company Limited

	DR N	CR N
Purchase Consideration	245,000	
Middle Belt Chemical		245,000
To record the agreed purchase consideration		
Goodwill	75,000	
Buildings	209,700	
Stock	31,500	
Bill Receivable	4,050	
Debtors		24,750
Debentures		100,000
Purchase consideration		245,000
To record the taking over of assets and liabilities		
Middle belt Company	245,000	
Share Capital		150,000
Share Premium		15,000
Cash		80,000

To record the settlement of purchase consideration

Notes:

It should be noted that all undistributed profits and reserve funds should be distributed amongst the shareholders of the selling company and should not be brought into the new company's book. However, employees fund like provident fund, Superannuation fund, Gratuities, etc are to be brought to the new company's books as it is expected that the new company will absorb the employees of the selling company.

4.0 CONCLUSION

Business combination is the bringing together of separate entities or business into one reporting entity. The result of nearly all business combinations is that one entity, the acquirer, obtains control of one or more other businesses, the acquirees. All business combinations are accounted for by applying the acquisition method; the acquirer shall, therefore, disclose information that enables users of its financial statements to evaluate the nature and financial effect of business combination that were made during the period.

5.0 SUMMARY

In this Unit, readers are informed on what business combination is; and reasons that may lead to business combination which can be in form of either amalgamation or absorption. The readers were also taken through the various accounting entries with respect to amalgamation and absorption. The Unit is a demonstration of the fact that accounting treatments are very clear on the issues of purchase consideration determination, amalgamation processes, absorptions and takeovers.

6.0 TUTOR-MARKED ASSIGNMENT

1. The Super Nigeria Limited takes over the following assets and liabilities standing in the books of a private business on 1st January, 2001.

Balance Sheet

	N		N
Capital	16,100	Freehold premises	6,000
		Plant and Machinery	2,000
		Stock	7,600
Creditors	1,200	Furniture	200
		Debtors	1,000
		Cash	500
	17,300		**17,300**

The purchase consideration is N20, 000 and it is to be discharge by the issue to the vendor of 10,000 ordinary shares of N1 each fully paid, 1,000 5% preference shares of n5 each fully paid and the balance in cash.

The company valued the freehold premises at 5,500 and the stock at N7, 000 and created a provision of bad debts equal to 5% of debtors. The cash balance of N500 is not taken over.

Required: Show the Journal entries in the books of Super Nigeria limited on 1st January, 2001.

2) Consider the Balance Sheets of WAZO PLC and BIA Company limited as at 31st December, 2008 as follows:

Balance Sheets on 31/12/2008

	WAZO PJC	BIA Company Ltd
	N	N
Assets:		
Fixed Assets:		
Freehold Premises	146,312	486,000
Plant & Machinery	200,000	156,000
Fixtures	120,000	390,000
Goodwill	40,000	-
	506,312	1,032,000
Current Assets:		
Investments	50,000	-
Cash	46,700	124,200
Debtors	184,300	256,000
Stocks	192,000	144,000
Bank	86,000	25,000
	559,000	549,200
Current Liabilities		
Creditors	98,000	46,000
Accrued expenses	46,000	120,000
Corporate Tax	44,000	-
	188,000	166,000
Financed By:		
Share capital	450,000	600,000
Share premium	-	215,000
Profit & Loss	127,312	175,200
	577,312	990,200
8% Debentures	300,000	425,000
	877,312	**1,415,200**

The shareholders of both WAZO PLC and BIA Company limited decided to amalgamate the two companies with effect from 1st January, 2008. It was therefore agreed that:

a) A new company WAZOBIA PLC is to be formed and should take over the assets and liabilities except where reservations are made.
b) The purchase consideration of WAZO PLC is agreed to be N1,400,000 and should be satisfied by an issue of 1,000,000 ordinary shares of 50k each and the balance to be paid in cash.
c) The assets and liabilities of WAZO PLC are to be taken over at their balance sheets values except investments which are to be taken over at their market value of N65,000 and debtors after making provision for bad debts of 1.5%.
d) The assets of BIA limited are to be taken over at their book values except the following which are to be taken over at the valuation shown:

	N
Freehold premises	800,000
Plant and Machineries	250,000
Goodwill	600,000
Debtors	250,000

e) The purchase of BIA limited is to be made by an issue of sufficient number of ordinary shares necessary to give it 45% ownership plus a cash payment of N842, 000.
f) Dala PLC and Kurna PLC should each subscribe for 600,000 ordinary shares of 50k each at a premium of 1.50k per share.

The whole money should be paid for on application.

You are required to show the above transactions in the books of:

a) WAZO PLC
b) BIA Company Limited
c) WAZOBIA PLC.

3a) What do you understand by the term 'Purchase Consideration'?
b) How is purchase consideration determined?

4a) How is the vendor in a takeover bid usually paid?
b) In what ways may limited companies amalgamate their businesses?

5a) Describe a scheme of amalgamation by absorption.
b) How is a "controlling interest" in a company acquired?

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UNIT 5 INTRODUCTION TO FINANCIAL RATIO ANALYSIS

CONTENTS

1.0 INTRODUCTION

Financial analysis is clearly the most important criterion for evaluating management performance, in particular, and the enterprise as a whole. The management of an enterprise and its outside suppliers of capital-creditors and investors- would want to undertake financial analysis in order to make rational economic, political or social decisions. This Unit introduces the concepts of ratio and financial analysis, emphasizing on the use of accounting ratios for effective financial analysis by business organizations.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- appreciate the concept of ratio
- understand how to conduct financial analysis, using accounting ratios
- test the efficiency and effectiveness of business enterprises

3.0 MAIN CONTENT

3.1 Financial Ratio Analysis

3.1.1 The Concept of Ratio

To evaluate the financial condition and performance of a business entity, the financial analyst needs certain yardsticks. The yardstick frequently used is a ratio, or index, relating two pieces of financial data to each other. A ratio is one number expressed in terms of another and is found by dividing one number, the base, into another. Its analysis facilities evaluation of accounting information by reducing complicated data into a smaller set. The use of ratios in accounting and finance provides the means of testing the efficiency of key features of a business as represented in the final accounts.

SELF ASSESSMENT EXERCISE 1

1. Define the term "ratio".
2. What is ratio use for in accounting?

3.2 Comparative Analysis Using Ratios

The analysis of financial ratios involves two types of comparison. First, the analyst can compare a present ratio with past and expected future ratios for the same company. The acid-test ratio for the present year-end could be compared with the acid-test ratio for the preceding year-end. Using the computed financial ratios for a number of years, an analyst can study the composition of changes in financial condition and performance of a business over time. In the comparison over time, it is best to compare not only the financial ratios but also the raw figures.

The second method of comparison involves comparing the ratios of the one business with those of similar businesses or with industry average at the same point in time. Such a comparison gives insight into the relative financial condition and performance of a business. It is only when comparing the financial ratios of one business with those of similar businesses or industry average that one can make realistic judgments.

SELF ASSESSMENT EXERCISE 2

1. Discuss the two type of comparison in ratio analysis.
2. Why is it important to compare raw figures apart from the ratios computed from them?

3.3 Users of Accounting Information and Their Interests

The type of financial ratio analysis varies according to the specific interests of the party involved. A trade creditor is interested primarily in the liquidity position of a business. His claim is short-term, and the ability of a business to pay this claim is best judged by means of a thorough analysis of its liquidity position, and so financial ratios to be analyzed must be liquidity-testing in nature.

The claim of a bondholder, on the other hand, is long term. Accordingly, he would be more interested in the cash flow ability of the business to service debt over the long run. The bondholder may evaluate this ability by analyzing the capital structure of the business, the major sources and uses of funds, its profitability over times and projections of future profitability. Ratio-wise, he would concentrate on debt and profitability ratios.

An investor in a company's common stock is concerned principally with present and expected future earnings and the stability of these earnings about a trend. As a result, the investor might concentrate his analysis on the profitability of the business. He would be concerned with its financial condition in so far as this condition affects the stability of future earnings. In his analysis, therefore, investments and profitability ratios would be concentrated on.

In order to bargain more effectively for outside funds, the management of a business should be interested in all aspects of financial analysis that outside suppliers of capital use in evaluating the business. In addition, management employs financial analysis for purposes of internal control. In particular, it is concerned with profitability on investment in the various assets of the business and in the efficiency of assets management. Management, therefore, should use all types of ratios in order to adequately analyze or test its performance.

Other interested groups in financial statement of businesses, who conduct financial ratio analysis, in one way or the other, are government and its agencies, potential buyers of business, actual and potential customers and present and aspiring employees.

SELF ASSESSMENT EXERCISE 3

1. Discuss any three users of accounting information and their information needs.
2. Why should management of a business be interested in all aspects of financial analysis?

3.4 Types of Ratios and Their Formulae

Ratios can be categorized in different ways. But for the purpose of our studies, financial ratios can be divided into six types: Overall Performance, Profitability, Productivity, Liquidity, Capital Structure and Investment ratios. Some of the ratios are computed from the Balance Sheet, some from the Income Statement and others from both the Balance Sheet and the Income Statement. It is important to recognize from the outset that no one ratio gives us sufficient information by which to judge the financial condition and performance of a business. It is only when we analyze a group of ratios that we will be able to make reasonable judgments.

3.4.1 Overall Performance Ratios

These ratios are used to test the general performance of a business and its management. Some of the ratio here are:

(i) Return On Investment (ROI) given by:

$$\frac{\text{NetProfitaftertax}}{\text{Total Assets}} \times 100$$

The ratio relates the profit earned, after tax and interest, to the total of the financial structure (total assets) of the business. It is used as the best test of the efficiency of management in the use of the resources of the business. It is sometimes called **Earning Power** Ratio. The higher the earning power, the more profitable the business is.

(ii) Return On Capital Employed (ROCE) given by:

$$\frac{\text{NetProfitbeforetaxandinterest}}{\text{Capital Employed}} \times 100$$

The ratio relates the profit earned before tax and interest to the amount of long term capital invested in the business. Capital employed means:

Total Assets less Current Liabilities (or just owners equity plus long-term liabilities). It is a test of the ability of a business to earn profit, making effective use of capital under its dispensation. The higher the ROCE, all things being equal, the more profitable the business would be.

(iii) Returns On Equity (ROE) given by:

$$\frac{\text{NetProfitaftertax}}{\text{Owners' Equity}} \times 100$$

OR

$$\frac{\text{NPaftertax} - \text{Pref.Div.}}{\text{Net Worth} - \text{Pref. Share}} \times 100$$

This ratio shows the actual return to the shareholders only, as the payment of interest to long term lenders, and, of course, taxes to government have been deducted. Comparison should be made with the returns in other investment, e.g. bank deposit interest, for a better assessment of a business that is apart from the inter-firm comparison and comparison over time.

3.4.2 Profitability Ratios

These ratios are used to test the profitability of a business in relation to turnover (sales). Some of the ratios are:

(i) Gross Profit Margin (GPM) given by:

$$\frac{\text{Sales-Costofgoodssold}}{\text{Sales}} \times 100$$

OR

$$\frac{\text{GrossProfit}}{\text{Sales}} \times 100$$

This ratio is a good measure of the efficiency of a business' operations. Increase in the ratio indicates increase in efficiency or performance.

(ii) Mark-up on Cost (MOC) given by:

$$\frac{\text{GrossProfit}}{\text{Cost of Goods sold}} \times 100$$

This ratio serves the same purpose as (i) above. The two ratios are used to analyze the trading profitability of a business. A fall in these ratios below expectation may be due to (a) reduction in selling price, (b) Poor buying or (iii) Poor stock control.

(iii) Net Profit Margin (NPM) given by:

$$\frac{\text{NetProfitbefore}}{\text{Sale}} \text{ tax x 100}$$

This ratio measures the final profit made on sales after all of the running expenses have been deducted from the gross profit. If this ratio is falling whilst gross profit margin remains constant, then increases in running costs (selling, administrative costs) should be investigated and efforts made to reduce them.

3.4.3 Productivity Ratios

These ratios are used to test the level of sales (turnover) obtained from the assets employed by the business. The higher the ratios, the better the performance of the reporting entity.

(i) Sales Per Employee (SPE) given by:

$$\frac{\text{Sales}}{\text{Number of Employees}}$$

This ratio is used to measure the productivity of the employees of a business. The effective use of labor is one of the key tasks of the management of a business and, so, this ratio is very important in that test. It is also relevant to the employees as it reflects their efforts during an accounting period; it shows increase or decrease in the employee effectiveness. The ratio is expressed in Naira (=N=) term.

(ii) Assets Turnover Ratio (ATR) given by:

$$\frac{\text{Sales}}{\text{Total Assets}}$$

This ratio expresses the number of times the value of assets utilized by a business has been generated into sales. The ratio is expresses in times.

(iii) Stock Turnover Ratio (STR) given by:

$$\frac{\text{CostofGoodsSold}}{\text{Average Stock}} \quad \text{OR} \quad \frac{\text{Sales}}{\text{Stock or Average Stock}}$$

This ratio is an important measure of the effective use of stock by a business. The adequacy of the ratio will depend on the type of industry. For example, a supermarket is likely to turnover its stock much more quickly than a furniture-making shop or jewelry. If the turnover is declining then the reasons should be investigated. Possible factors would include: (a) a large amount of slow moving or obsolete stock, (b) high levels of stock being held, (c) a wide range of products being stocked and (d) lack of control over purchasing.

iv(a) Debtors Turnover Ratio(DTR) given by:

$$\frac{\text{Sales}}{\text{Debtors}}$$

(b) Average Collection Period (ACP) Ratio given by:

$$\frac{\text{Debtors or Receivables} \times 365 \text{ days}}{\text{Credit Sales}}$$

3.4.4 Liquidity Ratios

Liquidity ratio is the term used to describe the extent to which a business can pay its debts as they fall due. Insolvency is the state of being unable to pay debts as they fall due. Insolvency may lead to bankruptcy and collapse of the business
Investors are unwilling to buy shares in, or lend money to, a company which is insolvent and traders are unwilling to supply goods on credit to companies that are or are likely to become insolvent. Some of these ratios are:

(i) Current Ratio (CR) given by:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

This ratio compares all short-term resources with all short-term obligations and indicates the ability of a company to meet its short-term debts using short-term sources of finance. As a guide, most businesses will require a ratio of 2:1. Too high the ratio will suggest too much money tied up in current assets; whilst too law the ratio could be dangerous if the creditors press for a quick payment.

(ii) Acid-Test Ratio (AR) or Quick Ratio (QR) given by:

Current Assets – Stock

Current Liabilities

This ratio takes tougher view as it excludes stock from the numerator. This is done because in some businesses it takes a long time to turn inventory into cash. As it is rare for trade creditors to ask for payment at the same time, time is normally allowed for money to be obtained from debtors – good debtors. A reasonable quick ratio is 1:1.

(iii) Average Payment Period (APP) given by:

$$\frac{\text{TotalCreditorsx365days}}{\text{Credit Purchases}}$$

NB: Some analysts use 360 days for a year. The period can be expressed in terms of months in which case 12 months would be multiplied with instead of 360 days.

This ratio reveals the average number of days taken by a business in making payment to trade creditors. A higher (than average credit period granted by creditors) ratio will indicate a high degree of insolvency. A low ratio indicates an efficient credit payment system.

3.4.5 Capital Structure Ratios

Companies are usually financed by (a) short-term loans like trade credit and bank overdraft; (b) Long-term loans like debentures or loan stocks; (c) Money deposited by persons or institutions who become shareholders or (d) Retained Earnings or Undistributed profit which belong to shareholders. The funds obtained through (a) and (b) are known as DEBT while those obtained through (c) and (d) are called EQUITY or shareholders' funds. Capital structure is about the long-term capitalization of a business which is given by the equity plus the long-term debt. Some of the ratios here are:

(i) Gearing (Debt) Ratio (GR) given by**:**

$$\frac{\text{TotalDebts}}{\text{Total Assets}} \text{ x } 100$$

The ratio measures the extent to which a business is financed by debt. Prospective lenders may wish to see the shareholders' contribution constituting at least 50% of the overall assets value of the business before lending their money to it, they may not be prepared to lend if further lending would push gearing ratio too high.

(ii) Debt-to-Net-Worth Ratio (DNWR) given by:

$$\frac{\text{Total Debts}}{\text{Net Worth}} \times 100$$

This ratio relates total debts (including current liabilities) to net worth (Equity). Depending upon the purpose for which the ratio is used stock sometimes is included as debt rather than as net worth, when analyzing a business. This is because preferred stock represents a prior claim from the standpoint of the investor in common stock. The ratio is a very good test of the long-term liquidity of a business, that is, its ability to meet long-term obligations.

(c) Long-term Debt to Capitalization(LDCR) given by:

$$\frac{\text{Long-term Debts}}{\text{Total Capitalization}} \times 100$$

This ratio indicates the relative importance of long-term debts in the capital structure or total capitalization of a business. Capitalization is usually defined to be invested capital (i.e. non-current liabilities) plus owners' equity. It is about the capital structure of a business or its financial structure (total assets) less current liabilities. Debt ratios tell us the relative proportions of capital contributed by creditors and by owners. They are strong means of measuring the financial risk of a business.

(d) Interest Cover Ratio(ICR) given by:

$$\frac{\text{Earnings Before Interest and Tax (EBIT)}}{\text{Interest Charged}}$$

An important factor affecting lending decisions is the ability of a business to satisfactorily meet its interest payments. If the gearing ratio is very high, a business will have large interest expenses to meet out of profit.

Interest cover ratio indicates the level of cover which the business has achieved. It shows the number of times the profit before interest and tax will cover the interest charged on the debt, at any given period of time.

3.4.6 Investment Ratios

The financial statement of quoted companies are used by prospective and existing investors and their advisers in order to make investment decisions like buying more shares, holding on shares or selling out shares. The investors are anxious to be reasonably assured that the security (share or stock) which they acquired or intend to acquire will offer a positive flow of future income or that its value will be appreciating. It is this assurance that encourages investors to commit their savings or, sometimes, borrowed funds.

Decisions on investment are assisted by investment ratios to be calculated from the financial statements of the target businesses or to be obtained from the published analysis on the pages of financial dailies or weeklies. Some of these ratios are:

(i) Earning Per Share (EPS) Ratio given by:

$$\frac{\text{Profit before tax}}{\text{Number of Shares (Common Stock)}}$$

This ratio is used to measure the success of a business in terms of profit attributable to each share held in the company. Success may result from improved performance in the use of assets. Growth resulting from improved performance is the real measure of a business success.

(ii) Price Earning (P/E) Ratio given by:

$$\frac{\text{Quoted Price (Market price) of one share (if any)}}{\text{Profit attributable to one share (EPS)}}$$

This ratio shows the confidence a shareholder can place in the profit growth of a business. A high P/E ratio suggests strong shareholder's confidence in the business and its future, and a low P/E ratio suggests low confidence. It is the most important ratio that influences price movement on most Stock Exchanges.

(iii) Earning Yield Ratio given by:

$$\frac{\text{EPS}}{\text{Market Price}} \times 100$$

This ratio is the reciprocal of price earnings ratio. It shows the return on current market price.

iv) Divided Per Share (DRS) Ratio given by:

$$\frac{\text{Dividend Paid (or Proposed)}}{\text{Number of Shares}}$$

This ratio indicates the dividend payable per share held in company.

(e) **Dividend Yield,** given by:

$$\frac{DPS \times 100}{\text{Market Price}}$$

This is relates the income from shares (the dividend) to the value of the investment in the business. The result can be compared with interest rates from other types of investments.

(vi) **Dividend Cover Rover Ratio**, given by**:**

$$\frac{\text{ProfitavailabletoOrdinaryShareholders}}{\text{Dividend Declared}}$$

Or

$$\frac{\text{Earnings}}{\text{Dividend}}$$

The ratio shows the number of times dividend is covered by earnings. The ratio indicates dividend and retention policy of a business, which is about amount to be paid as dividend to shareholders, out of the profit realized, and the amount to be retained in the business to finance future growth and expansion.

NB: Comparison has to be made with ratios of similar businesses or with the ratios of the business over time before reaching conclusion on the favorableness or otherwise of any of the twenty-three ratios discussed above, or any selection there from for meeting the requirements of an interested analyst.

SELF ASSESSMENT EXERCISE 4

1. Discuss the importance of "Overall Performance Ratios".
2. Compare the relevance of Liquidity Ratios and Productivity Ratios in testing the performance of a business.

4.0 CONCLUSION

The financial reports of enterprises are useless if they are not subjected to critical analysis and interpretation. The analysis is to be as comparative as possible, employing an objective tool/yardstick. The tool normally used by financial analysts to test the health, productivity and profitability of a business is ratio. This Unit presents an in-depth introductory discussion on the concept of ratio and how to employ it in the conduct of effective financial analysis with a view to making a lot of revelation about the performance of a reporting entity.

5.0 SUMMARY

This Unit has discussed the concept of ratio, use of ratios in financial statements analysis and interpretation, users of financial ratios and their interest and different classifications of financial ratios. The formulae for these ratios and how to use the ratios in taking informed decisions were discussed to guide students as to what they should be looking out for as they study financial statements of enterprises for various decision making purposes.

6.0 TUTOR-MARKED ASSIGNMENT

1. What do you understand by the term "Ratio Analysis" and in what ways is it useful to an understanding of a business financial statement?

2. Discuss the limitations of "Ratio Analysis" as a means of appraising business performance.

3. Enumerate five users of accounting information and discuss the information needs of any three of them, explaining how the needs are to be satisfied through ratio analysis.

4. Explain the following classifications of ratios, giving TWO example(s) of each:

(a) Profitability ratios
(b) Liquidity ratios
(c) Gearing (capital structure) ratios
(d) Investment ratios
(e) Productivity ratios
(f) Overall Performance ratios

2. Differentiate between the following:

(a) Capital structure and Financial structure
(b) Balance Sheet items and off-balance sheet items
(c) Financial Analyst and Financial Adviser

7.0 REFERENCES/FURTHER READING

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