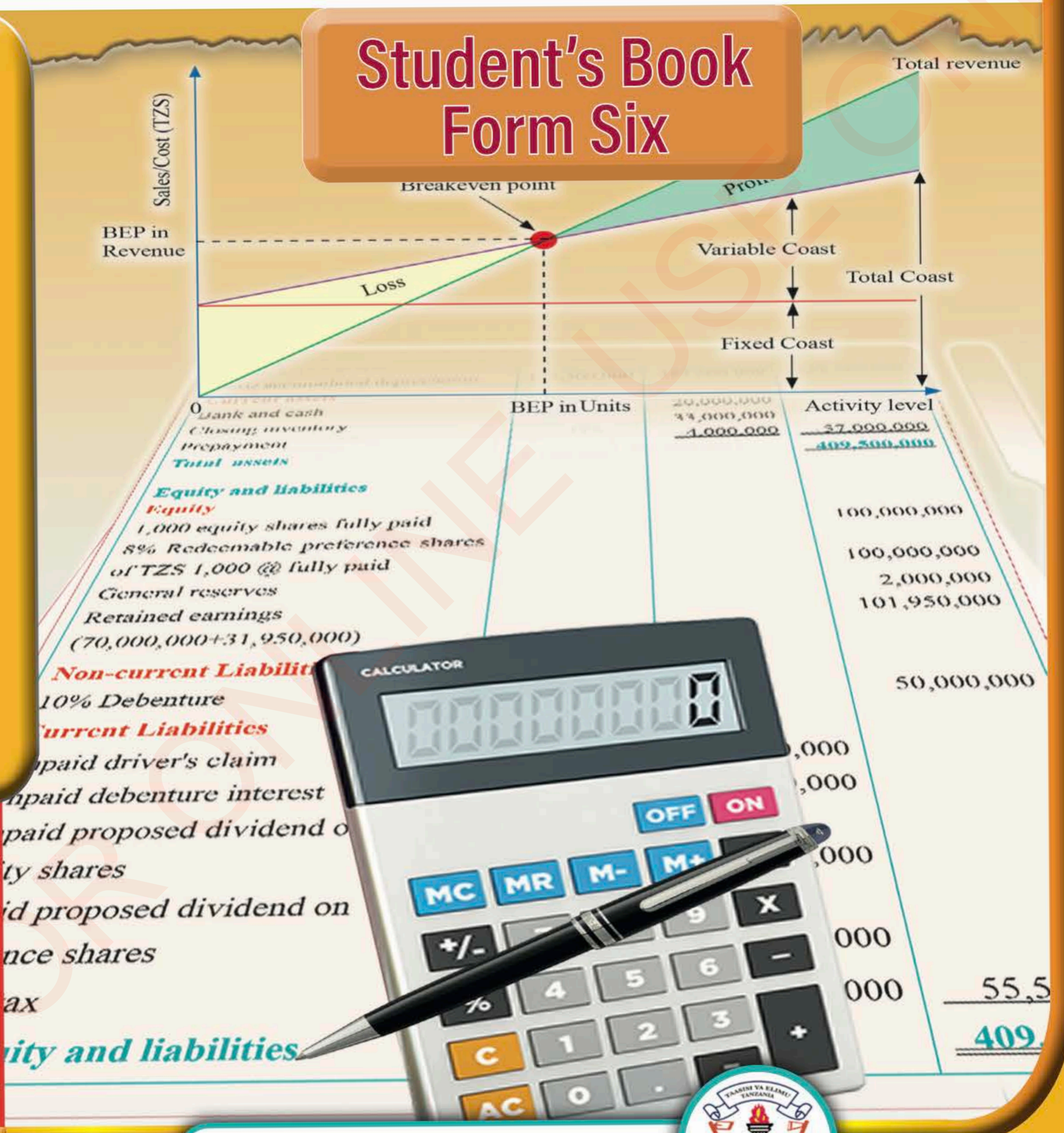
Accountancy

for Advanced Secondary Schools

Student's Book
Form Six



Tanzania Institute of Education

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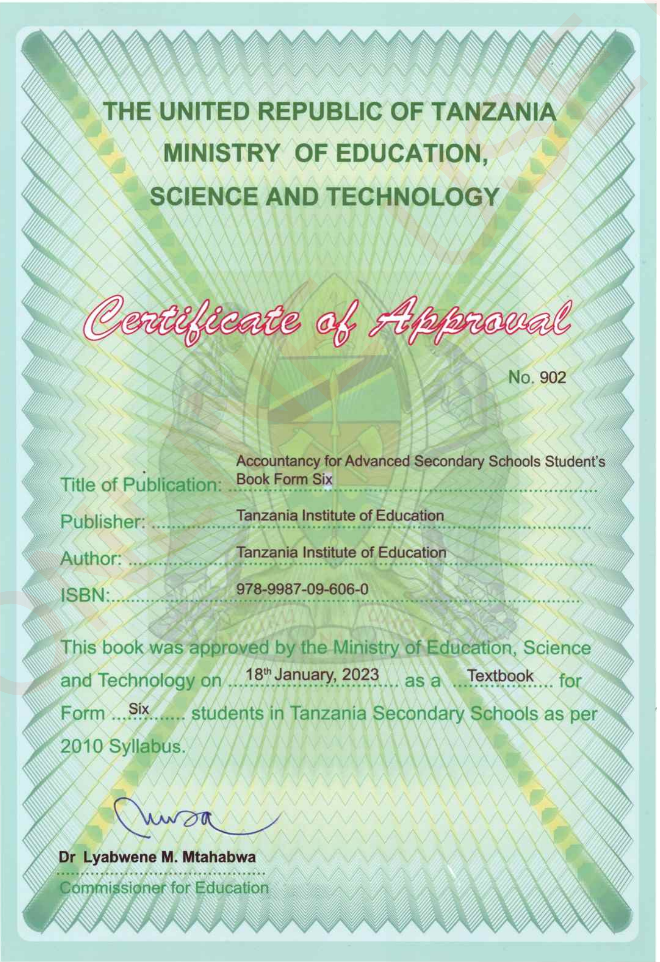

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Preface

This textbook, *Accountancy for Advanced Secondary Schools*, is written specifically for Form Six students in the United Republic of Tanzania. It is written in accordance with the 2010 Accountancy Syllabus for Advanced Secondary Education, Form V-VI, issued by the then, Ministry of Education and Vocational Training.

The book consists of ten chapters, namely Partnership accounting, Payroll accounting, Container accounting, Stock valuation and Accounting for Royalties. Other chapters are Company accounts, Hire purchase Accounting, Cost accounting, Computerized Accounting and Auditing. Each chapter contains text, examples, exercises and revision questions. You are encouraged to do all the exercises provided in this textbook, as well as other assignments given by your teacher. Doing so will enable you to develop the intended competencies.

Tanzania Institute of Education

Chapter One

Accounting for partnerships

Introduction

In partneships, people conduct business jointly and share profits or losses on agreed ratio. Doing business jointly helps to overcome most of the challenges faced by sole proprietors in different ways. In this chapter you will learn about the concept and features of a partnership business, methods of computing goodwill, revaluation of partnership assets and dissolution of partnership. You will also learn about the insolvency of a partner during dissolution and the application of the Garner versus Murray rule, accounting for amalgamation of partnerships, and the accounting for retirement and death of a partner. The competencies developed will enable you to forge effective businesses under partnerships, and to prepare relevant information and accounts in the books of a partnership firm.

Overview of the partnership business

When operating a business on sole trade, one has to rely on own savings, bank loans or loans from friends and family to finance the business. A sole trader takes on all the risks of starting and operating the business and is liable for all the organisation's liabilities. Sole traders have to shoulder the full burden of responsibility for their business.

Businesses operating under sole trade form suffer from problems of limited capital and lower access to various resources like human resource, time for business management and funding. To overcome these difficulties, people prefer to form partnerships. Partnerships allow partners to share their resources collectively and expand their business easier.

Definition and nature of a partnership

A partnership is a form of bussiness where two or more people agree to run a business together for profit earning purposes. In certain countries, there might be an upper limit to the number of partners. For example in Tanzania, section 463 of the Companies Act (2002) states that "No company, association or partnership consisting of more than twenty persons shall be formed for the purposes of carrying on any business that has for its object the acquisition of gain by the company, association or partnership or by the individual members thereof, unless it is registered as a company under this Act or is formed in pursuance of some other Act or of letters patent". This means the upper limit for individuals to form a partnership business is twenty. If the number exceed twenty, such a firm should be registered as a company under the companies Act. The profits or losses of the business are owed to the owners, and are therefore shared between the partners according to prior agreed ratios.

Features of partnerships

A normal partnership form of business will always be characterized by the following basic features:

Voluntary association: A partnership is a voluntary association of two or more persons agreing to carry on a business jointly for profit making. No person can be a partner against his or her will, because partnerships are based on voluntary agreements.

Agreement: For a partnership to exist there must be an agreement between partners to work together and share profits and/or losses between themselves. Partners may make such an agreement either verbally or in writing. If the agreement exists in writings, it is referred to as a partnership deed.

The agreement between partners, whether written or oral should put everything clear on their status as partners of their firm. This includes details pertaining to their responsibilities as partners, the nature of their business undertaking, and their profit and loss sharing ratio.

Business: There must be an existence of a business undertaking with the intention of earning profits.

Unlimited liability: The liability of each partner is unlimited, that each partner is personally liable for the debts incurred in the normal conduct of the business. When a partnership business is unable to pay its debts, the creditors may meet their claims from the personal properties of any or all of the partners.

Profit/loss sharing: The law requires the partners to share profits or losses according to their agreed profit sharing ratio. A person who works for the partnership business without having a share of profit or loss in it, will be regarded as an employee instead of a partner.

Mutual agency: A partnership business may be conducted either by all partners together or by one partner acting on behalf of all others. However, the decision of one partner taken in the ordinary course of business will be regarded as a decision of all partners. All partners are liable for acts of the firm individually and collectively. This means that every partner is an agent of the other partners, and of the partnership firm. This relationship between partners is known as agency relationship.

Advantages and disadvantages of partnership

Every business setting has its own advantages and disadvantages. A person making a decision to enter into business should select a setting that fits his/her circumstances, taking into consideration the advantages and disadvantages of the selected type of business setting. Following are the advantages and disadvantages of a partnership business setting.

Advantages of a partnership business

Less formal with fewer legal obligations:

Formalities involved in formation and operation of a business under partnership are less complicated compared to those involved in forming company. For example, only a partnership deed needs to be prepared to form a partnership, while articles of association and a memorandum of association should be prepared for formation of a company.

The accounting process and requirements are generally simpler for partnerships than for companies. In particular, a partnership bussiness does not need to maintain a set of statutory books like a company.

Easy to get started: The partners can agree to create the partnership verbally or in writing. In Tanzania is required to register a partnership business in the Business Registration and Licensing Agency (BRELA) wich is quite simple and it is done online.

Sharing the burden: Compared to operating a business individually as a sole trader, by working in a business partnership, partners benefit from companionship and mutual support. Starting and managing a business alone can feel stressful and daunting, particularly if you have not done it before.

Access to knowledge, skills, experience and contacts: Each partner will bring their own knowledge, skills, experience and contacts to the business, potentially giving it a better chance of success than partners trading individually.

Better decision-making: In a partnership the business benefits from the unique perspective brought by each partner. In business, very often two heads are better than one. The combined conclusion of debating and discussing a situation will lead to a better decision than what each partner could have decided individually.

Privacy: The affairs of a partnership business can be kept confidential by the partners. By contrast, in a company certain documents are available for public inspection at the office of the registrar of companies.

Ownership and control are combined: In a limited company, the owners do not manage the day to day operations of the business instead, management is done by other people – the management. By contrast, in a partnership business, the partners both own and control the business. As long as the partners can agree how to operate and drive forward the partnership, they’re free to run the bussiness without interference from other people. This can make a partnership business potentially more flexible, with the ability to adapt more quickly to changing circumstances.

More partners, more capital: The contribution of capital from more partners can help to accelerate growth, and borrowing capacity of the firm.

Easy access to profits: In a partnership business, the profits of the business are easily shared between the partners. In a limited company, by contrast, profits might be retained by the company or paid out with the approval of shareholders as dividends. While in partnerships the partners can just decide any how in their meetings.

Disadvantages of a partnership business

Despite the above explained advantages of a partnership business, this business setting also carries a number of disadvantages that should be taken into consideration before one decides to enter into the business. These disadvantages include:

The business has no independent legal status: A partnership business has no independent legal existence distinct from the partners. By default, a partnership will be dissolved upon the resignation or death of one of the partners. This possibility can cause insecurity and instability, divert attention from developing the business and will often not be the preferred outcome of the remaining partners.

Unlimited liability: The partners are personally liable for debts and losses incurred because the business does not have a separate legal personality. So, if the business runs into financial hardship, to the extent that is not capable of discharging its liabilities, the personal assets of the partners may be at risk of being seized by creditors. This would generally not be the case if the business was a limited company.

Limited access to capital: While a combination of partners is likely to be able to contribute more capital than a sole trader, a partnership will often still find it more difficult to raise money than a company. Financial institutions may prefer the greater accounting transparency, separate legal personality and sense of permanence that a partnership business lacks. Hence, the fund providers will either be unwilling to lend or will only do so on strong lending terms.

Most importantly, partneship businesses cannot issue shares or other securities for funding in the way a limited company can. The capital of their business depends much on partners' own contributions. This may lead to shortage of capital and foregoing of profitable investment opportunities

Potential for differences and conflict:

By running a business in a partnership model, partners lose their autonomy. They will not always do things on their own way, and each partner will need to be flexible with a high ability to negotiate.

Disagreements and arguments might then harm the business and damage the relationship between partners. Solving of such conflicts can consume partners' time, energy and money.

Slower and more difficult decision making:

Compared to running a business as a sole trader, decision-making can be slower as partners need to consult one another and discuss matters together, before a decision can be reached. Where the partners disagree, time will be spent negotiating to build agreement or consensus. Sometimes this might cause the partnership lose important opportunities.

Profits must be shared: while a sole trader retains all the profits of his/her business, those of a partnership are shared amongst the partners. A number of issues raises when deciding the ratio in which profits will be shared amongst partners. For example, how do different partners' respective skills valued; what happens when one partner is seen to be putting in less time and effort into the partnership? It is sometimes very difficult to bring a fair balance between effort and reward.

A partnership deed

This is the partnership agreement wherein all points of agreement are incorporated.

The following are the important aspects to be included in the partnership deed:

(a) Name of the firm, nature and location of the business;

(b) Commencement of business and the duration in which the firm expects to exist;

(c) Amount of capital to be contributed by each partner;

(d) The duties and rights of every partner;

(e) The rate of interest to be allowed on capitals and loans by the partners to the firm;

(f) The rate of interest to be charged on drawings made by partners;

(g) The extent to which a partner can make withdraw;

(h) The ratio in which profits or losses of the business will be shared amongst partners;

(i) The procedures to be followed in admission or retirement of a partner;

(j) The modality and timing for preparation of financial statements and their audit; and

(k) Circumstances under which a partnership may be dissolved.

Although the preparation of a partnership deed is not compulsory, it is always advised to prepare and have it in writing. This helps to reduce quarrels between partners and govern their functioning better.

Unlike the articles of association which need a formal registration, partnership deeds need not be registered mandatorily. However, it is advised to get it registered so as to prevent legal challenges to its validity when disagreements arise between the partners. The best partnership deed should be comprehensive and clear about all details pertaining to the functioning of a firm. It should not contain any ambiguities.

The Concept of goodwill

Goodwill is the good name or good reputation of the business which brings benefit to the business concerned. This goodwill enables the business to earn profit that exceed the expected levels. That is, the normal profit expected for a similar business in the same industry under same circumstances. An old and well-established business entity develops a good name and reputation over a period of time; it builds trust with the customers and also has more business connections as compared to a newly set up business. Several factors might contribute, such as, good quality of goods and services provided; location of the business; reliable supply; competitive prices and better customer service. When a business grows, goodwill grows as well, leading to higher sales and higher profits compared to a newly formed business.

When partners carry on business for a long time, they earn a reputation for it. This reputation translates in monetary terms into expected future profits above normal profits. We commonly refer to this excess profit as the firm's goodwill. If firm earns excess profits than it expects, this is due to its goodwill. If a business has a bad reputation or any other negative factors, it is very difficult for the owner of that business to be paid for goodwill when selling that business. Goodwill is considered as an intangible asset of a business which cannot be seen or felt but exists in reality and can be bought and sold.

Valuation of goodwill

Apart from the values of assets and liabilities, when valuing a business, one should take into account different parameters like the reputation of the business owners; efficiency of the management; the market share; competitive advantage and quality of its products. These are some of the aspects that create goodwill, and when these factors are good, the value of goodwill becomes high.

Although there are methods of computing the value of goodwill, still valuation of goodwill is subjected to the assumption of the person making valuation. A customer who buys a business, looks at its goodwill and hopes to gain super-profits. Hence, goodwill applies to only firms that make super-profits.

Circumstances that require valuation of goodwill

In partnership firms, whenever there is a change in the mutual rights of partners, the need for valuation of goodwill arises. Such changes include: -

(a) Change in the profit-sharing ratio amongst the existing partners;
(b) Admission of a new partner;
(c) Retirement of a partner;
(d) Death of a partner;
(e) Dissolution of a firm; and
(f) Amalgamation of partnership firms.

If any of the above situations occurs, the profit sharing ratio will change and so partner's share on the goodwill also changes. Therefore, adjustments to the capital accounts of the old partners are required before such a change takes place. This will enable the old partners retain their share of goodwill generated to that date. Therefore, partners should calculate and distribute existing goodwill first before taking further steps.

Goodwill computation methods

Goodwill of a partnership business can be computed using either of the following methods:

(a) Average profit method;
(b) Super profit method; or
(c) Capitalisation method.

Average profit-based method

Under this method, goodwill is calculated basing on years of purchase of average profits of the past few years. The number of years of purchase is generally determined on the basis of the average period a new business will take in order to bring it to the current state of the existing business. It may also be determined on the basis of the number of years for which the past average profit will be earned in future. Under the average profit method, goodwill can be calculated using the simple average method or the weighted average method.

Simple average profit method: Under this method, goodwill is calculated by multiplying the average profit over a certain number of years by number of years of purchase.

$$\text{Goodwill} = \text{Average profit} \times \text{Number of years of purchase}$$

But:

$$\text{Average profit} = \frac{\text{Total adjusted profit}}{\text{Number of years}}$$

Average profit is calculated by taking the summation of the adjusted profits of certain number of years, dividing by the total number of such years.

Adjusted profit = *Actual profit + Past expenses not required in the future – Past revenues not likely to be earned in the future + Additional income expected in the future – Additional expenses expected to be paid in the future.*

Example 1.1

The following are the adjusted profits of Matunda Hardware and Company for the last five years:

Years	**2017**	**2018**	**2019**	**2020**	**2021**
Adjusted Profits in TZS	42,000,000	55,000,000	35,000,000	38,000,000	46,000,000

Required:

Calculate the value of goodwill at three (3) years purchase of average profits of five (5) years.

Solution

$$\text{Goodwill} = \text{Average profit} \times \text{Number of years of purchase}$$

$$\text{Average profit} = \frac{\text{Total adjusted profit}}{\text{Number of years}}$$

Average profit

$$= \frac{\text{TZS}(42{,}000{,}000 + 55{,}000{,}000 + 35{,}000{,}000 + 38{,}000{,}000 + 46{,}000{,}000)}{5}$$

$$= \frac{\text{TZS } 216{,}000{,}000}{5}$$

Average profit = TZS 43,200,000

Number of years of purchase = 3

$$\text{Goodwill} = \text{Average profit} \times \text{Number of years of purchase}$$

$$= \text{TZS } 43{,}200{,}000 \times 3 = \text{TZS } 129{,}600{,}000$$

Goodwill = TZS 129,600,000

Example 1.2

The following information relate to profits of Miembeni Enterprises for the three years from 2020 to 2022.

Years	**2020**	**2021**	**2022**
Profits in TZS	4,070,000	4,400,000	5,000,000

A non-recurring income of TZS 60,000 is included in the profits of the year 2020. The closing stock of the year 2021 was overvalued by TZS 100,000.

Required:

Calculate the value of goodwill on the basis of 2 years purchase of the average profits of 3 years.

Solution

Recurring income is the portion of a firm's income, which is expected to continue in the future. Unlike one-off sales, recurring incomes are predictable, stable and can be counted on to occur at regular intervals going forward with a relatively high degree of certainty. So, the non-recurring income is the one-off sales that cannot be predicted.

Therefore, we start by adjusting the profit figure, to exclude the effect of non-recurring income and overvaluation of stocks in our profit figures.

Adjusted profit = Actual profit + Past expenses not required in future – Past revenues not likely to be earned in future + Additional income expected in future – Additional expenses expected to be paid in future

Years	**2020**	**2021**	**2022**
Actual profits in TZS	4,070,000	4,400,000	5,000,000
Less: Non-recurring Income *:* Overvalued closing stock	60,000 -	- 100,000	- -
Add: Overvalued opening stock	-	-	100,000
Adjusted profits	**4,010,000**	**4,300,000**	**5,100,000**

$$\text{Average profit} = \frac{\text{Total adjusted profit}}{\text{Number of years}}$$

$$\text{Average profit} = \frac{\text{TZS }(4,010,000+4,300,000+5,100,000)}{3}$$

$$\text{Average profit} = \frac{TZS\ (13,410,000)}{3} = \text{TZS } 4,470,000$$

Average profit = TZS 4,470,000

Number of years of purchase = 2

Therefore:

$$\text{Goodwill} = \text{Average profit} \times \text{Number of years of purchase}$$

$$\text{Goodwill} = \text{TZS } 4,470,000 \times 2 = \text{TZS } 8,940,000$$

Goodwill = TZS 8,940,000

Example 1.3

The following particulars are available in respect of KISU enterprises, a business that is undertaken on a partnership basis:

Years	**2016**	**2017**	**2018**
Profits in TZS	30,000,000	29,000,000	32,000,000

The following additional information is also available:

(i) Profit of 2016 includes a non-recurring income of TZS 3,000,000.

(ii) Profit of 2017 is reduced by TZS 2,000,000 due to stock destroyed by fire.

(iii) The stock is not insured. But it is decided to insure the stock in future. The insurance premium is estimated at 5,600,000 per annum.

Required:

Calculate the value of goodwill on the basis of 2 years purchase of average profits of the last three years.

Solution

The new thing in this example is the insurance premium. If the firm decides to insure the stocks against fire, then it will be required to be paying for insurance premium on annual basis. Such payments will reduce the profit of the year.

Therefore, we start by adjusting the profit. (All figures in TZS)

Years	**2016**	**2017**	**2018**
Actual profits	30,000,000	29,000,000	32,000,000
Less: Non-recurring Income	3,000,000	-	-
Add: Value of destroyed stock	-	2,000,000	-
Adjusted profits	**27,000,000**	**31,000,000**	**32,000,000**

$$\text{Average profit} = \frac{\text{Total adjusted profit}}{\text{Number of years}}$$

$$\text{Average profit} = \frac{\text{TZS } (27{,}000{,}000 + 31{,}000{,}000 + 32{,}000{,}000)}{3}$$

$$= \frac{\text{TZS } 90{,}000{,}000}{3}$$

Average profit = TZS 30,000,000

But: The next year's profits will be affected by the payments of insurance premiums. Therefore, we should take the average profit, deduct the annual insurance premium amount, before calculating the value of goodwill.

= TZS 30,000,000 – 5,600,000 = TZS 24,400,000

Number of years of purchase = 2

Therefore:

Goodwill = Average profit × Number of years of purchase

= TZS 24,400,000 × 2= TZS 48,800,000

Goodwill = TZS 48,800,000

Weighted average profits method: Under this method, goodwill is calculated by multiplying the weighted average profit by a certain number of years of purchase. The weights are assigned to each year's profit. Weighted profit is ascertained by multiplying the weights assigned with the respective year's profit. The sum of the weighted profits is then divided by the sum of weights assigned to determine the weighted average profit. This method is used when the profits trend is not stable, i.e., they show increasing or decreasing trend. More weight is generally given to the current years and vice versa.

$$\text{Weighted average profit} = \frac{\text{Total weighted profit}}{\text{Total weights}}$$

Goodwill = Weighted average profit × Number of years of purchase

Example 1.4

On 31st March 2020, AMA and Company, a business owned jointly by Abdul and Maria, decided to admit a new partner Nilan, and the new firm to be renamed as AMANI Enterprises. For the purpose of admitting this new partner, Abdul and Maria have decided to value goodwill of their business at three (3) years purchase of the weighted average profit of the last four (4) years. Profits of the past four (4) years and the respective weights are as follows:

Details	**2017**	**2018**	**2019**	**2020**
Profits (in TZS)	22,000,000	26,000,000	28,000,000	32,000,000
Weights assigned	1	2	3	4

Required: Compute the value of goodwill.

Solution

Calculation of the total weight and total weighted profit

Year	**Profits in TZS**	**weight**	**Profit x weight**
2017	22,000,000	1	22,000,000
2018	26,000,000	2	52,000,000
2019	28,000,000	3	84,000,000
2020	32,000,000	4	128,000,000
TOTAL	-	**10**	**TZS 286,000,000**

$$\text{Weighted average profit} = \frac{\text{Total weighted profit}}{\text{Total weights}}$$

$$= \frac{\text{TZS } 286,000,000}{10} = \text{TZS } 28,600,000$$

$$\text{Goodwill} = \text{Weighted average profit} \times \text{Number of years of purchase}$$

$$= \text{TZS } 28,600,000 \times 3 = \text{TZS } 85,800,000$$

Goodwill = TZS 85,800,000

Super profits method:

Under this method, super profit is the base for calculating the value of goodwill. Super profit is the excess of average profit above the normal profit of a business. Average profit is calculated by dividing the total of adjusted actual profits of certain number of years by the total number of such years.

Super profit = Average profit – Normal profit

Normal profit is the profit earned by similar business firms under normal conditions, and this is obtained by taking the value of capital employed times the normal rate of return. The normal rate of return is regarded as the rate at which profit is earned by similar business entities in the industry under normal circumstances.

Normal profit = Capital employed × Normal rate of return

Capital employed = (Non-Current assets + Current assets) – Current liabilities

As it is done in the average profit method, under this method, goodwill is calculated by multiplying the super profit by a certain number of years of purchase.

Goodwill = Super profit × Number of years of purchase

Example 1.5

Basing on the following information of Batiki Enterprise, calculate the value of goodwill based on five (5) years purchase of super profit:

(i) Capital employed: TZS 38,000,000

(ii) Normal rate of return: 18%

(iii) Average profit of the business: TZS 7,200,000

Solution

Normal profit = Capital employed × Normal rate of return

= TZS 38,000,000 × 18% = 6,840,000

Super profit = Average profit – Normal profit

= TZS 7,200,000 – 6,840,000

= TZS 360,000

Goodwill = Super profit × Number of years of purchase

= TZS 360,000 × 5 = TZS 1,800,000

Goodwill = TZS 1,800,000

Example 1.6

Calculate the value of goodwill at 3 years purchase of super profit from the following information:

(a) Capital employed: TZS 118,000,000
(b) Normal rate of profit: 16%
(c) Net profit for 5 years:

Year	2014	2015	2016	2017	2018
Net profit in TZS	30,000,000	32,000,000	35,000,000	37,000,000	40,000,000

Solution

Goodwill = Super profit × Number of years of purchase

Super profits = Average profit – Normal profit

$$\text{Average profit} = \frac{\text{Total adjusted profit}}{\text{Number of years}}$$

$$= \frac{\text{TZS } (30,000,000 + 32,000,000 + 35,000,000 + 37,000,000 + 40,000,000)}{5}$$

$$= \frac{\text{TZS } (174,000,000)}{5} = 34,800,000$$

Normal profit = TZS 118,000,000 × 16% = TZS 18,880,000

Super Profit = Average profit – Normal profit = TZS 34,800,000 – 18,880,000

Super profit = TZS 15,920,000

Goodwill = Super profit × Number of years of purchase

= TZS 15,920,000 × 3yrs

Goodwill = TZS 47,760,000

Capitalisation method

Under the capitalisation method, goodwill is the excess of capitalised value of average profit of the business over the actual capital employed in the business.

Goodwill = Total capitalised value of the business – Actual capital employed

The total capitalised value of the business is calculated by capitalizing the average profits on the basis of the normal rate of return.

$$\text{Capitalised value of the business} = \frac{\text{Average profit}}{\text{Normal rate of return}} \times 100$$

$$\text{Actual capital employed} = \text{Fixed assets } (\text{excluding goodwill}) + \text{Current assets} - \text{Current liabilities}$$

Example 1.7

From the following information of a small enterprise partnership business, find out the value of goodwill by capitalization method:

(a) Average profit = TZS 6,000,000
(b) Normal rate of return = 10%
(c) Capital employed = TZS 45,000,000

Solution

$$\text{Capitalised value of the business} = \frac{\text{Average profit}}{\text{Normal rate of return}} \times 100$$

$$= \frac{\text{TZS } 6,000,000}{10} \times 100$$

Capitalized value of the business = TZS 60,000,000

But:

Actual capital employed = TZS 45,000,000

Therefore:

Goodwill = Total capitalized value of the average profit – Capital employed

= TZS (60,000,000 – 45,000,000)

Goodwill = TZS 15,000,000

Exercise 1.1

1. Considering the features and definition of a partnership, briefly explain how partnerships differ from sole proprietorship.
2. Explain why one would choose partneship business against a limited company.
3. Explain the term goodwill and discuss its importance in a partnership business.
4. State the factors which contribute to formation of goodwill.
5. List and explain the conditions that may necessitate calculation of goodwill in the partnership business.

6. Dutu and Karani operates a joint business firm (DUKA). The information on profit for prior years is given in the table below.

Year	2021	2020	2019	2018	2017	2016
Profit in TZS	7,700,000	8,400,000	7,500,000	9,000,000	6,800,000	5,200,000

The following additional information were also available:

(i) They decided to admit Nimo as a third partner.

(ii) A non-recurring income of TZS 800,000 is included in the profits of the year 2018.

(iii)The closing stock of the year 2019 was overvalued by TZS 280,000.

(iv) Stocks valued at TZS 900,000 in 2021 caught fire in store, and hence impacted the pofit figure.

Required: Calculate the value of goodwill used avarage profit method.

7. Zita and Sons earn an average profit of TZS 6,000,000 with a capital of TZS 40,000,000. The normal rate of return is 12%. Using capitalization method calculate the value of goodwill of the firm.

8. H & H Sewing Centre is a partnership firm with Danguche and Saidi as its partners. They now decide to admit James in the firm and hence need to value goodwill. Capital employed is TZS 5,000,000 at the end of the fourth (4th) year of operation. The normal rate of return is 18%. Their profits for the last four (4) years were as follows:

Year	1	2	3	4
Profit in TZS	1,000,000	1,200,000	1,500,000	2,000,000

Required: Calculate the value of goodwill using super profit method.

Accounting for goodwill

The goodwill of a business is the result of the old partners' efforts in the past. Therefore, at the time of admission of new partner, the goodwill is to be valued and adjusted in the old partners' capital accounts. Always a new partner's share of goodwill is brought in when admitted to a partnership firm. This amount is meant to compensate the existing partners for the loss of their share in the future profits of the firm. Goodwill is raised in the books only when some consideration in money or money's worth has been paid for it by the new partner.

In case the new partner who does not bring in cash for goodwill, an adjustment entry is passed by which the new partner's capital account is debited with his share of goodwill in the new firm and that amount is credited to old partners' capital accounts in the ratio of sacrifice. This entry reduces the capital of the new partner by the amount of his share of goodwill and results in payment for goodwill by the new partner to the old partners.

The important thing to be considered is the ratio in which goodwill is to be credited to the old partners. Traditionally, goodwill was credited to the old partners in the old profit-sharing ratio and, if the amount was to be written-off, it was written off to all the partners in the new profit-sharing ratio. This traditional method is only relevant when the ratio among the old partners does not change after admission of a new partner.

Technically, when admitting a new partner, the profit-sharing ratios of the old partners do change. If goodwill is paid as a compensation to the old partners for their surrendering to the new partner a part of their profits, then the amount to be credited to the old partners should be in the ratio of loss of profit.

Suppose, Sila and Dila, sharing profits in the ratio of 3:2, admit Nila as a new partner and it is agreed that, the new profit-sharing ratio be 2: 2: 1. It is obvious that Dila does not suffer at all on Nila's admission. She previously received $\frac{2}{5}$th of profits; she still receives $\frac{2}{5}$th of profits. It is Sila's alone who has suffered and, therefore, any amount brought in as goodwill by Nila should be credited to Sila only. Thus, it is proper to credit goodwill brought in by a new partner to the old partners in the ratio in which they suffer on the admission of the new partner. That ratio is known as loss of profit ratio/ sacrificing ratio.

Accounting treatments

At the time of admission of a new partner, premium method or revaluation method is used in the accounting treatments for goodwill in the books of a partnership firm. The accounting treatments using these two methods are presented in detail in the subsequent sub-sections.

Premium method: Under this method, when the incoming partner brings his share of goodwill in cash, the existing partners share it in the sacrificing ratio. The accounting treatments are as follows:

S/N	Narrations	Details	Dr.	Cr.
1.	When a new partner brings in goodwill in cash	Dr. Cash account Cr. New partner's capital account	xxx	 xxx
2.	Distributing the goodwill to the old partners according to their sacrificing ratios	Dr. New partner's capital account Cr. Old partners' capital accounts	xxx	 xxx

Example 1.8

Zainab and Diana are in a partnership firm (ZeD) sharing profits in the ratio: 5:3 respectively. Kilian is admitted as partner to bring in TZS 800,000 as his capital and TZS 160,000 as goodwill. The new profit-sharing ratio among Zainab, Diana and Kilian respectively is agreed to be 7: 5: 4 respectively.

Required: Prepare the journal entries to effect the goodwill on admission of Kilian.

Solution

Journal entry

S/N	Details	Dr.	Cr.
1.	Cash account Kilian's capital account *(Being the total amount introduced by Kilian)*	960,000	 960,000
2.	Kilian's capital account Zainab' capital accounts Diana's capital account *(Being the goodwill element/ premium written off from Kilian's capital account to the old partner's capital account)*	160,000	 120,000 40,000

Workings:

Old profit-sharing ratios between Zainab and Diana $= 5:3 = \frac{5}{8}:\frac{3}{8}$

New profit-sharing ratios $= 7:5:4 = \frac{7}{16}:\frac{5}{16}:\frac{4}{16}$

Zainab's sacrifice ratio $= \frac{5}{8} - \frac{7}{16} = \frac{3}{16}$

Diana's sacrifice ratio $= \frac{3}{8} - \frac{5}{16} = \frac{1}{16}$

Their sacrifice is therefore = 3:1

For Zainab $= \frac{3}{4} \times 160{,}000 = \text{TZS}120{,}000$

For Diana $= \frac{1}{4} \times 160{,}000 = \text{TZS}\,40{,}000$

In the above example, the old partners have allowed the amounts of goodwill credited to their capital accounts remain in the business. However, the internal arrangements may allow the old partners to wholly or partly withdraw the amounts of goodwill credited to their capital accounts. Suppose, in the above example, Zainab and Diana withdraw their shares of goodwill brought in by Kilian. The accounting treatments will be:

S/N	Details	Dr.	Cr.
1.	Cash account Kilian's capital account *(Being the total amount introduced by Kilian)*	960,000	 960,000
2.	Kilian's capital account Zainab's capital account Diana's capital account *(Being the goodwill element/premium written off from Kilian's capital account to the old partner's capital account)*	160,000	 120,000 40,000
3.	Zainab's capital account Diana's capital account Cash account *(Being the goodwill brought in by the new partner, shared and withdrawn by the old partner)*	120,000 40,000	 160,000

In case the goodwill existed in the books of accounts, and the partners decide not to continue with it before admitting the new partner, such amount of goodwill should be written off by distributing it to the old partners, according to their old profit-sharing ratios. When the partners decide that goodwill continues to appear in the books, the new partner will bring his proportionate share of goodwill only in respect to the difference between the new value and the book value. All the journal entries in this respect are the same.

Revaluation method: Under this method, the new partner does not bring in cash for his share of goodwill. Hence, old partners make valuation of their goodwill before admitting the new partner. The following accounting treatment is required to adjust goodwill in the books of the firm.

Details	Dr.	Cr.
Goodwill account Old partners' capital accounts *(Being goodwill raised to its present value and credited in the old partners' capital accounts)*	xx	 xx

If goodwill appears in the statement of financial position of the old partners at a value less than the present value then the difference between the present value and the recorded amount of goodwill is credited to the old partners' capital accounts in the old ratio.

If the goodwill appears in the statement of financial position at a value more than the present value of goodwill, the reduction in the value of goodwill should be debited to the old partners' capital accounts in the old profit-sharing ratio.

Example 1.9

Debora and Jaden are partners sharing profit in the ratio of 3:2. They decided to admit Vivian for $\frac{1}{5}$ share of future profit. At the time of admission, Goodwill of the firm is valued at TZS 5,000,000. Prepare journal entries, if:

(a) There is no goodwill in the books of the firm.
(b) The goodwill appears at TZS 3,000,000.
(c) The goodwill appears at TZS 5,800,000.

Solution

(a) Journal entry when there is no goodwill in the books of the firm:

Details	Dr.	Cr.
Goodwill account	5,000,000	
Debora's capital account		3,000,000
Jaden's capital account		2,000,000
(Being goodwill raised and credited in the old partners' capital accounts)		

(b) Journal entry when goodwill appears at TZS 3,000,000

Details	Dr.	Cr.
Goodwill account	2,000,000	
Debora's capital account		1,200,000
Jaden's capital account		800,000
(Being Goodwill raised and credited in the old partners' capital accounts)		

(c) Journal entry when goodwill appears as TZS 5,800,000

Details	Dr.	Cr.
Debora's capital account	480,000	
Jaden's capital account	320,000	
Goodwill account		800,000
(Being goodwill reduced from TZS 5,800,000 to TZS 5,000,000, the difference of TZS 800,000 debited to old partners' capital accounts)		

Exercise 1.2

1. A and B are partners sharing profits and losses in the ratio 3:2 respectively. They admit C as partner who is unable to bring goodwill in cash but pays TZS 960,000 as his capital. The goodwill of the firm is to be valued at two years' purchase of three years' average profits. The profits for the three years were TZS 300,000, TZS 240,000, and TZS 270,000. An adjustment entry is to be passed for C's share of goodwill. The new ratio will be 5: 2: 2.
   Required: Prepare necessary journal entry to record the goodwill following C's admission.
2. Zuhura and Rehema were partners sharing profits in the ratio of 6:4 respectively. On 1st April, 2021 they admitted Hamad as a new partner; all the partners agreeing to share future profits equally. On the date of admission of the new partner, there was a goodwill account in the old firm's ledger showing a balance of TZS 8,000,000. The current value of firm's goodwill was placed at TZS 16,000,000. Hamadi paid TZS 5,000,000 by way of his capital. He also paid an appropriate amount for his share of goodwill. Zuhura and Rehema wrote off the goodwill account before Hamad's admission.
   Required: Pass the necessary journal entries.

Revaluation of partnership assets

Revaluation of partnership assets refers to the process of determining the current value of assets in a partnership business. This process arises when there are changes in the partnership business such as when:

(a) A new partner is admitted;
(b) A partner leaves the firm;
(c) There is a change in profit or loss sharing ratios; and
(d) A business is sold.

The assets are revalued because actual value of assets may be different from the figures shown in the statement of the financial position. Thus, in order to record the increase and decrease in the market value of the assets, Revaluation Account is prepared and any profits or losses associated with this increase or decrease are distributed among the old partners of the firm.

On revaluation, there can be a gain or a loss. Gain arises when revised value of an asset is higher than its book value and loss occurs when revised value of an asset is lower than its book value. Any resulting gain or loss will be shared by old partners in their old sharing ratios.

Accounting treatments:

There are two possible accounting treatments when assets of a partnership are revalued. These are:

(i) Maintaining the assets at the revised values

(ii) Maintaining the assets at their original values

Maintaining the assets at the revised values

In this method a revaluation account (profit or loss adjustment account) is opened. This account will record all the gains or losses as the result of revaluation of assets. It will then be closed by transferring the balance to old partner's capital account or current account in their agreed old ratios. Current account may be used only when partners maintain such an account.

Journal entries

For assets showing an increase in value:

Details	Dr.	Cr.
Asset account	xx	
Revaluation account		xx
(With the increase in value of an asset)		

For assets showing a decrease in value:

Details	Dr.	Cr.
Revaluation account	xx	
Asset account		xx
(With the decrease in value of an asset)		

For transferring the balance of revaluation account:

(a) If there is an increase in total value of assets (profit on revaluation)

Details	Dr.	Cr.
Revaluation account	xx	
Old partners' capital accounts in their old profit sharing ratios		xx
(Being a profit on revaluation shared between the old partners)		

(b) If there is a fall in total value of assets (loss on revaluation)

Details	Dr.	Cr.
Old partners' capital accounts in their old profit sharing ratios	xx	
Revaluation account		xx
(Being a loss on revaluation shared between the old partners)		

Example 1.10

Amina and Brenda share profits in the ratio of 3:1. Their balances as at 31st December 2020 were as follows:

Statement of financial position as at 31st December, 2020

Assets	**TZS**	**TZS**
Non-Current Assets		
Buildings	10,000,000	
Fixtures	4,000,000	14,000,000
Current Assets		
Inventory	8,000,000	
Accounts Receivable	6,000,000	
Bank	12,000,000	26,000,000
Total Assets		**40,000,000**
Capital and Liabilities		
Capital Accounts:		
- Amina	12,000,000	
- Brenda	8,000,000	20,000,000
Reserve		3,000,000
Current liabilities		
Accounts payable		17,000,000
Total capital and liabilities		**40,000,000**

On 1st January, 2021, Calista was admitted into partnership on the following conditions:

(i) That Calista pays TZS 4,000,000 for $\frac{1}{5}$ share of profits;

(ii) New profit sharing ratio is 3:1:1

(iii) That Calista pays TZS 2,000,000 for goodwill. Half of this sum is to be withdrawn by Amina and Brenda;

(iv) That inventory and fixtures reduced by 10% each, and a 5% provision for doubtful debts be created on accounts receivable;

(v) That the value of buildings be appreciated by 20%.

Required: Prepare all the necessary ledger accounts and a statement of financial position after admission *(assuming partners decide to maintain the revised values).*

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Balance b/d	12,000,000	1st Jan., 2021	Amina's capital	750,000
	Calista's Capital	6,000,000		Brenda's capital	250,000
			1st Jan., 2021	Balance c/d	17,000,000
2nd Jan., 2021	Balance b/d	**18,000,000**			**18,000,000**
		17,000,000			

Dr. **Inventory account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Balance b/d	8,000,000	1st Jan., 2021	Revaluation	800,000
			1st Jan., 2021	Balance c/d	7,200,000
		8,000,000			**8,000,000**
2nd Jan., 2021	Balance b/d	7,200,000			

Dr. **Fixtures account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Balance b/d	4,000,000	1st Jan., 2021	Revaluation	400,000
				Balance c/d	3,600,000
		4,000,000			**4,000,000**
2nd Jan., 2021	Balance b/d	3,600,000			

Dr. **Provision for doubtful debts account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Jan., 2021	Balance c/d	300,000	1st Jan., 2021	Revaluation	300,000
		300,000			**300,000**
			2nd Jan., 2021	Balance b/d	300,000

Dr. **Buildings account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Balance b/d	10,000,000	1st Jan., 2021	Balance c/d	12,000,000
	Revaluation	2,000,000			
		12,000,000			**12,000,000**
2nd Jan., 2021	Balance b/d	12,000,000			

Dr. **Reserve account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Amina's capital	2,250,000	1st Jan., 2021	Balance b/d	3,000,000
	Brenda's capital	750,000			
		3,000,000			**3,000,000**

Dr. **Revaluation account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Fixtures	400,000	1st Jan., 2021	Buildings	2,000,000
	Inventory	800,000			
	Provision for doubtful debt	300,000			
	Amina's capital	375,000			
	Brenda's capital	125,000			
		2,000,000			**2,000,000**

Dr **Partners capital account** **Cr**

Details	Amina	Brenda	Calista	Details	Amina	Brenda	Calista
Bank	750,000	250,000	-	Balance b/d	12,000,000	8,000,000	-
Amina's capital	-	-	1,500,000	Bank	-	-	6,000,000
Brenda's capital	-	-	500,000	Calista's capital	1,500,000	500,000	-
				Reserve	2,250,000	750,000	-
Balance c/d	15,375,000	9,125,000	4,000,000	Revaluation	375,000	125,000	-
	16,125,000	**9,375,000**	**6,000,000**		**16,125,000**	**9,375,000**	**6,000,000**
				Balance b/d	15,375,000	9,125,000	4,000,000

Statement of financial position as at 1st January, 2021

Details	TZS	TZS
Non-current assets		
Buildings	12,000,000	
Fixtures	3,600,000	15,600,000
Current assets		
Inventory	7,200,000	
Accounts receivable	6,000,000	
Less: Provision for doubtful debts	(300,000)	
Bank	17,000,000	29,900,000
Total assets		**45,500,000**
Capital and liabilities		
Capital accounts:		
- Amina	15,375,000	
- Brenda	9,125,000	
- Calista	4,000,000	28,500,000
Current liabilities		
Accounts payable		17,000,000
Total capital and liabilities		**45,500,000**

Workings

1. Amount of goodwill to be withdrawn by Amina and Brenda

Amount paid by Calista for goodwill = TZS 2,000,000

$$\text{Amount to be withdrawn by Amina and Brenda} = \frac{1}{2} \times \text{TZS}\,2{,}000{,}000 = \text{TZS}\,1{,}000{,}000$$

This amount will be shared by Amina and Brenda using loss of profit ratio, i.e. 3:1

$$\text{Amina} = \frac{3}{4} \times \text{TZS}\,1{,}000{,}000 = \text{TZS}\,750{,}000$$

$$\text{Brenda} = \frac{1}{4} \times \text{TZS}\,1{,}000{,}000 = \text{TZS}\,250{,}000$$

2. Revaluation amounts

Fixtures = 10% × TZS 4,000,000 = TZS 400,000

Inventory = 10% × TZS 8,000,000 = TZS 800,000

Buildings = 20% × TZS 10,000,000 = TZS 2,000,000

Provision for doubtful debts = 5% × TZS 6,000,000 = TZS 300,000

3. Distribution of profit to old partners in old ratios

Old partners will share the balance of Revaluation Account according to their old ratios.

$$\text{Amina} = \frac{3}{4} \times \text{TZS}\,500{,}000 = \text{TZS}\,375{,}000$$

$$\text{Brenda} = \frac{1}{4} \times \text{TZS}\,500{,}000 = \text{TZS}\,125{,}000$$

4. Loss ratio is computed as follows:

$$\text{Old profit-sharing ratio A and B} = 3:1 = \left(\frac{3}{4} : \frac{1}{4}\right)$$

$$\text{New Profit-sharing ratio A and B and C} = 3:1:1 = \left(\frac{3}{5} : \frac{1}{5} : \frac{1}{5}\right)$$

Loss by A on admission of a new a partner C

$$\text{Loss by A} = \frac{3}{4} - \frac{3}{5} = \frac{15 - 12}{20} = \frac{3}{20}$$

$$\text{Loss by B} = \frac{1}{4} - \frac{1}{5} = \frac{5 - 4}{20} = \frac{1}{20}$$

So, the loss sharing ratio will be 3:1

Maintaining assets at their original values

When partners decide to maintain the original values of assets or don't intend to change the values of assets in the books after admission, a Memorandum Revaluation Account is opened and the increase or decrease in the value of assets are entered in this account. This account is then closed and the balance be transferred to partners' capital or current accounts according to their old sharing ratios. All entries are reversed and the balance from reversal is then shared by all partners in their new sharing ratio. The reversal is done to restore the original values of assets.

Example 1.11

Use example 1.10, to prepare all the necessary ledger accounts and Statement of financial position after admission if partners decide to maintain the original values of assets.

Solution

Dr. **Memorandum revaluation account** **Cr.**

Details	TZS	Details	TZS
Fixtures	400,000	Buildings	2,000,000
Inventory	800,000		
Provision	300,000		
Amina's capital (3/4)	375,000		
Brenda's capital (1/4)	125,000		
	2,000,000		**2,000,000**
Reversal of CR items		Reversal of DR items	
Buildings	2,000,000	Fixtures	400,000
		Inventory	800,000
		Provision	300,000
		Capital accounts:	
		- Amina	300,000
		- Brenda	100,000
		- Calista	100,000
	2,000,000		**2,000,000**

Dr. **Partners' capital accounts** **Cr.**

Details	Amina	Brenda	Calista	Details	Amina	Brenda	Calista
Bank	750,000	250,000	-	Balance b/d	12,000,000	8,000,000	-
Revaluation	300,000	100,000	100,000	Bank	-	-	6,000,000
- Amina	-	-	1,500,000	Calista	1,500,000	500,000	-
- Brenda	-	-	500,000	Reserve	2,250,000	750,000	-
Balance c/d	15,075,000	9,025,000	3,900,000	Revaluation	375,000	125,000	-
	16,125,000	**9,375,000**	**6,000,000**		**16,125,000**	**9,375,000**	**6,000,000**
				Balance b/d	15,075,000	9,025,000	3,900,000

Dr. **Bank account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2021	Balance b/d	12,000,000	1st Jan., 2021	Amina's capital	750,000
	Calista's capital	6,000,000		Brenda's capital	250,000
			1st Jan., 2021	Balance c/d	17,000,000
		18,000,000			**18,000,000**
2nd Jan., 2021	Balance b/d	17,000,000			

Workings

1 . Calculating new sharing ratios:

Calista ratio = $\frac{1}{5}$. Remain ratio to be shared by existing partners as $= 1 - \frac{1}{5} = \frac{4}{5}$

Based on old ratio, the new ratio will be, remaining ratio × old ratio. Therefore,

$$\text{Amina} = \frac{4}{5} \times \frac{3}{4} = \frac{3}{5}$$

$$\text{Brenda} = \frac{4}{5} \times \frac{1}{4} = \frac{1}{5}$$

Statement of financial position as at 1st January, 2021

Assets	**TZS**	**TZS**
Non-current assets		
Buildings	10,000,000	
Fixtures	4,000,000	14,000,000
Current assets		
Inventory	8,000,000	
Accounts receivable	6,000,000	
Bank	17,000,000	31,000,000
Total assets		**45,000,000**
Capital and liabilities		
Capital accounts:		
- Amina	15,075,000	
- Brenda	9,025,000	
- Calista	3,900,000	28,000,000
Current liabilities		
Accounts payable		17,000,000
Total capital and liabilities		**45,000,000**

2. ***Calculation of the amount to be shared***

Amount to be shared by all partners (including new admitted partners) will be equal to agreed ratio multiplied by the difference between debit and credit side. In above Example, debit side is greater than credit side by TZS 500,000, therefore the sharing amounts will be;

$$\text{Amina} = \frac{3}{5} \times \text{TZS}\,500{,}000 = \text{TZS}\,300{,}000$$

$$\text{Brenda} = \frac{1}{5} \times \text{TZS}\,500{,}000 = \text{TZS}\,100{,}000$$

$$\text{Calista} = \frac{1}{5} \times \text{TZS}\,500{,}000 = \text{TZS}\,100{,}000$$

Exercise 1.3

1. Rashid and Ramadhan are in partnership sharing profit or loss in the proportion of 3:2. Their statement of financial position as at 31st December, 2019 was as follows:

Statement of financial position as at 31st December, 2019

Details	**TZS**	**TZS**
Assets		
Non-current assets		
Plant and machinery	3,600,000	
Patents	2,400,000	6,000,000
Current assets		
Inventory	3,600,000	
Accounts receivables	4,800,000	
Investments	2,400,000	
Bank	960,000	11,760,000
Total assets		**17,760,000**
Capital and liabilities		
Capital accounts:		
- Rashid		9,600,000
- Ramadhan		7,200,000
Current liabilities		
Accounts payable		960,000
Total capital and liabilities		**17,760,000**

On 1st January, 2020, Rajab was admitted on the following terms:

(a) Rajab has to bring in TZS 6,000,000 as capital and TZS 2,400,000 as goodwill. Goodwill is to be maintained in the books;

(b) Plant and machinery are subjected to a reduction of TZS 480,000 and patents by 10%; and

(c) A provision for doubtful debt is required at 5% on accounts receivables. Partners decide to maintain the revised values of assets after admission of Rajab.

Required:

Prepare all the necessary ledger accounts and statement of financial position after admission of Rajab.

2. The following is the statement of financial position of the firm of Bakari and Caren as at 30th April, 2018.

Statement of financial position as at 30th April, 2018

Details	**TZS**	**TZS**
Non-current assets		
Buildings	8,750,000	
Plant and machinery	12,250,000	
Fixtures	1,225,000	22,225,000
Current assets		
Inventory	7,000,000	
Accounts receivable	11,725,000	
Bank	1,050,000	19,775,000
Total assets		**42,000,000**
Capital and liabilities		
Capital Accounts:		
- Bakari	14,000,000	
- Caren	10,500,000	24,500,000
Reserves		3,500,000
Current liabilities		
Accounts payable		14,000,000
Total capital and liabilities		**42,000,000**

The partners share profits or losses equally. They decide to admit Dickson into partnership on 1st May, 2018. The terms of the admission being that, Dickson pays TZS 1,750,000 for goodwill which was to be retained in the business and TZS 5,250,000 as capital for $\frac{1}{5}$ share of profit.

On admission of Dickson, firms' assets were agreed to be revalued as follows:

(a) Buildings to be valued at TZS 10,500,000;
(b) Plant and machinery to be reduced to TZS 10,500,000;
(c) Fixtures to be reduced by 10%;
(d) TZS 175,000 to be written off as bad debts;
(e) Stock to be valued at TZS 6,300,000; and
(f) Provision for doubtful debts to be made at 5%.

After admission of Dickson, partners decided to maintain assets at their original values.

Required:

Prepare the necessary ledger accounts and statement of financial position after the admission of Dickson.

3. The following is the statement of financial position of Bobo, Chausiku and Daudi as at 30th June, 2020.

Statement of financial position as at 30th June, 2020

Details	**TZS**	**TZS**
Assets		
Non-current assets		
Buildings	9,000,000	
Plant and machinery	12,000,000	
Motorcar	2,340,000	23,340,000
Current assets		
Inventory	7,950,000	
Accounts receivable	3,000,000	
Bank	1,500,000	12,450,000
Total assets		**35,790,000**
Capital and liabilities		
Capital accounts:		
- Bobo		12,600,000
- Chausiku		13,500,000
- Daudi		7,140,000
Current liabilities		
Accounts payable		2,550,000
Total capital and liabilities		**35,790,000**

They agree to admit Maria as a Partner on 1st July, 2020 on the following terms:

(a) All partners to share profits and losses equally;

(b) Buildings to be appreciated by 10%;

(c) Plant and machinery to be depreciated by 20%;

(d) Bobo to take-over the motorcar at an agreed valuation of TZS 2,700,000;

(e) A provision of 5% to be made on accounts receivable;

(f) Stock has to be brought into the books at cost price which is TZS 6,300,000. Previously they were valued by old partners at market price;

(g) The goodwill of the firm was to be valued at two years' purchases of average profits for the last three years. The profits for the last three years were TZS 6,000,000, TZS 9,000,000, and TZS 15,000,000 respectively; and

(h) Maria is to bring TZS 7,500,000 as capital.

You are required to prepare:

(i) Revaluation account;

(ii) Partners' capital accounts; and

(iii) Statement of financial position as at 1st July, 2020 after admission of Maria.

Dissolution of a partnership and of a partnership firm

Dissolution of a partnership and dissolution of a partnership firm are two different concepts with different meanings. While dissolution of partnership refers to the change of the relation between one partner and other partners of the firm, dissolution of a partnership firm implies that the entire firm comes to an end.

The following table shows the differences between the two concepts:

S/N	Basis	Dissolution of a partnership	Dissolution of a partnership firm
	Termination of business	The business is not terminated.	The business of the firm is closed.
	Settlement of assets and liabilities	Assets are revalued and new statement of financial position is drawn.	Assets are sold and realised, and liabilities are paid off.
	Court 's intervention	Court does not intervene because partnership is dissolved by mutual agreement and according to the law.	A firm can be dissolved by the court's order.
	Economic relation	Economic relationship remains but may be subjected to changes.	Economic relationship between the partners comes to an end.
	Closure of books	Is not required because business is not terminated.	All books of accounts are closed.

Generally, a partnership or partnership firm is dissolved when one of the following circumstances occurs: -

(a) Change of mutual contract in cases when there is change in profit sharing ratio among partners;

(b) Admission of a new partner;

(c) Retirement or death of a partner;

(d) Insolvency of a partner;

(e) Completion of a venture if partnership was formed for specific venture;

(f) Expiry of the period of partnership if partnership was formed for a specified period; or

(g) Where there is a merger or amalgamation of two or more partnership firms.

Forms of dissolution

Dissolution by agreement: A firm is dissolved in case all the partners give consent to it as per the terms of partnership agreement.

Compulsory dissolution: A firm is dissolved compulsorily when all the partners except one partner become insolvent or insane which make them incompetent to sign a contract; or where the business becomes illegal; or where all the partners except one decide to retire from the firm or die; or on expiry of the period for which the partnership was formed; or on completion of the specific venture or project for which the firm was formed.

Dissolution by notice: A firm may be dissolved if any of the partners gives a notice in writing to the other partners signifying his intention of seeking dissolution of the firm.

Dissolution by court: A court may order a partnership firm to be dissolved when a partner becomes insane, a partner becomes permanently incapable of performing the duties as a partner, a partner deliberately and consistently commits breach of agreements relating to the management of the firm and a partner transfer all of the interest in the firm to a third party.

Accounting treatments for dissolution of a partnership firm

When there is a valid reason to dissolve the partnership firm, the following steps must be followed to effect such dissolution in the books of accounts:

(i) Open a realisation account and transfer all assets except cash in hand or at bank at book values, debiting the realisation account and the various assets are credited and thus closed. It should be remembered that trade receivables and provisions for bad debts accounts are two separate accounts and the gross amount of trade receivables should be transferred;

(ii) The realisation account should be credited with the actual amount realised by sale of assets, cash or bank account will be debited. If a partner takes over an asset, his capital account should be debited and realisation account credited with the value agreed upon;

(iii) Costs of dissolution or realisation of assets which include legal, accountants and administration expenses are debited to the realisation account and credited to bank or cash account;

(iv) The actual amount paid to external liabilities should be debited to the respective liability account and bank or cash account is credited;

(v) If any external liability is paid by a partner on behalf of the firm, debit respective liability account and partner capital account should be credited with the amount agreed upon;

(vi) Realisation account will show profit or loss. If the debit side is greater than credit, there is a loss; if the credit side is greater than debit, there is a profit. Profit or loss is transferred to the capital accounts of partners in the profit-sharing ratio. In case of profit, realisation account is debited and capital accounts are credited, in case of loss, capital accounts are debited and realisation account is credited;

(vii) Partner's loans if any, should be paid. In this case loan account is to be debited and corresponding credit entry to bank account;

(viii) Any reserves of accumulated profit in the books as shown in the statement of financial position should be transferred to the partners' capital account using the partner's profit sharing ratios; and

(ix) Partners' capital account will show how much amount is due to them or from them. The partner owing money to the firm should pay, bank account will be debited and his capital account credited. Money owing to a partner should be paid to him, his capital account will be debited and the bank account credited. This will close the capital accounts as well as the firm bank account.

The following table presents the required accounting entries made to record dissolution of a partnership firm:

S/N	Scenario	Accounting treatment		
1.	Realisation account is opened, in which all the assets except bank and cash are transferred to the debit side of this account	Dr. Realisation account Cr. Respective assets account	xx	 xx
2.	When assets are disposed of for cash	Dr. Bank/Cash account Cr. Realisation account	xx	 xx
3.	In case the partner has taken the assets	Dr. Partner's capital account Cr. Realisation account	xx	 xx
4.	Any expenses incurred during dissolution	Dr. Realisation account Cr. Bank/Cash account	xx	 xx
5.	Payment of external liability	Dr. Liability account Cr. Bank/Cash account	xx	 xx

6.	In case of actual amount differ from the book value; the difference should be transferred to realisation account.	
	If actual amount received from disposal is greater than the book value of respective asset, then the entry to record the difference should be:	Dr. Respective asset account xx Cr. Realisation account xx
	If actual amount received from disposal is less than the book value of respective asset, then entry to record the difference should be:	Dr. Realisation account xx Cr. Respective assets account xx
7.	When partners agree to discharge the liability on behalf of the firm	Dr. Respective liability account xx Cr. Partner's capital account xx
8.	Payment of partner's loans or advance	Dr. Partner's loan account xx Cr. Bank/Cash account xx
9.	Any accumulated reserves/ profits should be transferred to partner's capital accounts according to their profit-sharing ratios	Dr. Accumulated reserves account xx Cr. Partners' capital accounts xx
10.	Balance in the realisation account represents profit or loss on realisation. This should be transferred to partners' capital accounts according to their profit-sharing ratios.	
	If there is profit on the realisation	Dr. Realisation account xx Cr. Partners' capital accounts xx
	If there is loss on the realisation	Dr. Partners' capital accounts xx Cr. Realisation account xx
11.	Any debit balance in the partners' capital accounts should be settled by partners depositing cash in the firm's bank account	Dr. Bank/Cash account xx Cr. Partner's capital account xx
12.	Any credit balance in the partners' capital accounts should be paid to partners	Dr. Respective partner account xx Cr. Bank/Cash account xx

Example 1.12

A, B and C were partners in a firm sharing profits and losses in the ratio of 5:3:2. Due to misunderstandings among themselves, they decided to dissolve the partnership with effect from 31st December, 2021 on which, the firm's financial position was as follows:

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Plant and machinery	1,600,000	
Furniture	25,000	
Motor vehicles	625,000	2,250,000
Current assets		
Inventory in trade	150,000	
Receivables	355,000	
Bank balance	70,000	575,000
Total assets		**2,825,000**
Capital and liabilities		
Capital accounts:		
- A	700,000	
- B	800,000	
- C	900,000	2,400,000
Current accounts:		
- A	90,000	
- B	50,000	
- C	(15,000)	125,000
Current liabilities		
Payables		300,000
Total capital and liabilities		**2,825,000**

The following information was given:

(i) Plant and machinery costing TZS 400,000 were taken by C at an agreed valuation of TZS 450,000 and the remaining plant realised TZS 500,000;

(ii) Motor vehicles were taken over by B at an agreed value of TZS 550,000;

(iii) Account receivable included a bad debts of TZS 10,000 and the rest was realised subject to a cash discount of 10%;

(iv) Inventory costing TZS 40,000 were taken by A at an agreed value of TZS 50,000 and the rest were disposed out at 20% above the book value;

(v) Account payable amounting to TZS 25,000 was untraceable and other account payables accepted payment allowing 15% discount;

(vi) Furniture was outdated and realised nothing; and

(vii) Dissolution expenses paid amounted to TZS 100,000.

Required:

Prepare the necessary ledger accounts to close the books of partnership.

Solution

Dr. **Realisation account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Plant & machinery	1,600,000	1st Jan., 2022	C's capital (Plant & machinery)	450,000
	Furniture	25,000		B's capital (Motor vehicle)	550,000
	Motor vehicles	625,000		Bank (receivables)	310,500
	Inventory in trade	150,000		A's capital (Inventory)	50,000
	Receivables	355,000		Bank (inventory)	132,000
	Dissolution expenses	100,000		Untraceable payables	25,000
				Discount on payables	41,250
				Bank (plant & machinery)	500,000
				Capital accounts:	
				- A	398,125
				- B	238,875
				- C	159,250
		2,855,000			**2,855,000**

Dr. **Bank account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	70,000	1st Jan., 2022	Payables	233,750
	Receivables	310,500		Dissolution expenses	100,000
	Inventory	132,000		Capital accounts:	
	Plant & machinery	500,000		- A	341,875
				- B	61,125
				- C	275,750
		1,012,500			**1,012,500**

Dr. **Partners' capital accounts** **Cr.**

Details	A	B	C	Details	A	B	C
Current accounts	-	-	15,000	Balance b/d	700,000	800,000	900,000
Realisation (P&M)	-	-	450,000	Current accounts	90,000	50,000	-
Realisation (MV)	-	550,000	-				
Realisation (Inv)	50,000	-	-				
Realisation (loss)	398,125	238,875	159,250				
Bank	341,875	61,125	275,750				
	790,000	**850,000**	**900,000**		**790,000**	**850,000**	**900,000**

Dr. **Partners' current accounts** **Cr.**

Details	A	B	C	Details	A	B	C
Balance b/d	-	-	15,000	Balance b/d	90,000	50,000	-
Capital accounts	90,000	50,000	-	Capital accounts	-	-	15,000
	90,000	**50,000**	**15,000**		**90,000**	**50,000**	**15,000**

Dr. **Plant and machinery account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	**1,600,000**	1st Jan., 2022	Realisation	**1,600,000**

Dr. **Furniture account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	**25,000**	1st Jan., 2022	Realisation	**25,000**

Dr. **Motor vehicle account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	**625,000**	1st Jan., 2022	Realisation	**625,000**

Dr. **Inventory account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	**150,000**	1st Jan., 2022	Realisation	**150,000**

Dr. **Receivables account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Balance b/d	**355,000**	1st Jan., 2022	Realisation	**355,000**

Dr. **Payables account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Realisation (untraceable)	25,000	1st Jan., 2022	Balance b/d	300,000
	Realisation (Discount)	41,250			
	Bank	233,750			
		300,000			**300,000**

Exercise 1.4

1. Clearly explain the difference between dissolution of a partnership and dissolution of a partnership firm.
2. Explain the reasons that may lead to dissolution of a partnership.
3. Explain the accounting treatments necessary to effect the partnership dissolution.
4. X, Y and Z were partners in a firm sharing profits and losses in the ratio of 4:4:2. Due to completion of intended venture, they decided to dissolve partnership with effect from 31st December, 2021 on which firm position was as follows:

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Plant and machinery	2,000,000	
Furniture	1,450,000	
Motor vehicles	1,250,000	4,700,000
Current assets		
Inventory in trade	300,000	
Account receivables	710,000	
Bank balance	140,000	1,150,000
Total assets		**5,850,000**
Capital and liabilities		
Capital accounts:		
- X	1,400,000	
- Y	1,600,000	
- Z	2,000,000	5,000,000
Current accounts:		
- X	180,000	
- Y	100,000	
- Z	(30,000)	250,000
Current liabilities		
Account payables		600,000
Total capital and liabilities		**5,850,000**

The following additional information was given:

(a) Plant and machinery costing TZS 800,000 were taken by Z at an agreed valuation of TZS 1,000,000 and the remaining plant realised TZS 1,100,000;

(b) Motor vehicles were taken over by Y at an agreed value of TZS 1,200,000;

(c) Receivables were realised at a discount of 10%;

(d) Inventory costing TZS 70,000 were taken by X at an agreed value of TZS 150,000 and the rest were disposed out at 25% above the book value;

(e) Account payable amounting to TZS 60,000 was untraceable and other account payables accepted payment allowing 15% discount; and

(f) Dissolution expenses paid amounted to TZS 250,000.

Required: Prepare the necessary ledger accounts to close the books of the partnership firm.

5. Asu, Basu and Chiku were carrying on a business in the partnership sharing profit and loss in the ratio of 1:2:2 respectively. However, due to persistent misunderstanding amongst the partners the firm was dissolved as on 31st December, 2021. Their final statement of financial position was presented as follows:

Statement of financial position as at 31st December, 2021

Details	**TZS '000'**	**TZS '000'**
Non-current assets		
Plant and machinery	370,000	
Fixtures and fittings	80,000	580,000
Computer equipment	30,000	
Investment	100,000	
Current assets		
Inventory	70,000	
Account receivable	100,000	
Less: provision	(30,000)	250,000
Prepayment	50,000	**830,000**
Cash at bank	60,000	
Total assets		

Capital and liabilities		
Capitals accounts:		
- Asu	100,000	
- Basu	300,000	
- Chiku	200,000	600,000
Current account:		
- Asu	20,000	
- Basu	40,000	
- Chiku	10,000	70,000
Non-current liabilities		
Mortgage payables		85,600
Current liabilities		
Account Payable		74,400
Total capital and liabilities		**830,000**

The assets were realised as follows:

(a) Plant and machinery for TZS 400,000,000;

(b) Fixtures and fittings for TZS 60,000,000;

(c) Inventory was sold for TZS 95,000,000; and

(c) Account receivable TZS 75,000,000.

Basu took over the investment and computer equipment at an agreed value of TZS 130, 000,000. Asu assumed the responsibility of paying the mortgage. While creditors were settled less 5% discount. However, the partnership incurred expense amounting to TZS 20,000,000 for legal, accountants and administration expenses in the process of dissolution.

Required: Post into the ledger accounts to close books of the partnership.

The Garner versus Murray case and insolvency of partners

When one or more partners are personally insolvent, while others are solvent during dissolution of a partnership, then Garner versus Murray rule apply. According to this rule, when dissolution is being undertaken and where the capital account of one of the partners has a debit balance, it means the partner owes the partnership some money. Such a partner is regarded to be insolvent and is unable to make any payment towards the deficiency. The Garner versus Murray rule requires the amount owed by the insolvent partner be shared by the solvent partners according to the ratios of their last agreed capital balances. If the partnership and all partners are insolvent and cannot contribute in full to meet the creditors' demand, the balance of the account payable should finally be transferred to a deficiency account.

Example 1.15

A, B and C who shared profits equally have traded in partnership for many years. The business was declining and they decided to dissolve it on 31st December, 2021. The closing statement of financial position at that date was as follows:

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Land and buildings	40,000,000	
Plant and machinery	10,000,000	50,000,000
Current assets		
Inventory	11,000,000	
Receivables	18,000,000	29,000,000
Total assets		**79,000,000**
Capital accounts:		
- A	21,900,000	
- B	14,600,000	
- C	3,500,000	40,000,000

Non-current liabilities		
Mortgage loan from TMRC		20,000,000
Current liabilities		
Payables	12,000,000	
Bank overdraft	7,000,000	19,000,000
Total capital and liabilities		**79,000,000**

Plant and machinery and inventory were sold by auction and realised TZS 5,150,000 and TZS 2,000,000 respectively. To facilitate prompt payment to account payable, the bank agreed to increase the existing overdraft temporarily and the firm was able to settle account payable on time as a result the firm obtained a discount of TZS 300,000 and allowances of TZS 1,700,000 on settlement which was effected by 15th January, 2022.

The bank however, charged TZS 250,000 interest on overdrafts made, the account receivables realised TZS 15,600,000. The land and buildings were taken over by A (subject to existing mortgage loan) and valued at TZS 30,000,000. Legal cost and accountants fees amounted to TZS 1,000,000 which was paid by the firm.

Required: Prepare ledger accounts to effect the dissolution, assuming that 'C' was unable to contribute more than TZS 3,200,000 of the deficiency. Amount due to partners was paid on 31st January, 2022.

Solution

Dr. **Realisation account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Land and building	40,000,000	1st Jan., 2022	Plant and machinery	5,150,000
	Plant and machinery	10,000,000		Inventory	2,000,000
	Account receivable	18,000,000		Payables - discount	300,000
	Inventory	11,000,000		Payables - allowance	1,700,000
	Dissolution expense	1,000,000		Bank- receivables	15,600,000
	Bank interest on O/D	250,000		A's capital - land & building	30,000,000
				Capital accounts:	
				- A	8,500,000
				- B	8,500,000
				- C	8,500,000
		80,250,000			**80,250,000**

Dr. **Bank account** **Cr.**

Date	Details	TZS	Date	Details	TZS
1st Jan., 2022	Plant and machinery	5,150,000	1st Jan., 2022	Balance b/d	7,000,000
	Inventory	2,000,000		Account payable	10,000,000
	Realisation – (receivables)	15,600,000		Realisation-bank interest	250,000
	Capital account:			Realisation expenses	1,000,000
	- C	3,200,000		Capital accounts:	
				- A	2,320,000
				- B	5,380,000
		25,950,000			**25,950,000**

Dr. **Partners' capital accounts** **Cr.**

Details	A '000'	B '000'	C '000'	Details	A '000'	B '000'	C '000'
Realisation (Land and					21,900	14,600	3,500
building)	30,000	-	-	Balance b/d	20,000		
Realisation (loss)	8,500	8,500	8,500	Mortgage	-	-	3,200
To C's capital	1,080	720	-	Bank	-	-	1,800
Bank	2,320	5,380	-	From A & B			
	41,900	**14,600**	**8,500**		**41,900**	**14,600**	**8,500**

Dr. **Land and building account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2021	Balance b/d	**40,000,000**	31st Dec., 2021	Realisation	**40,000,000**

Dr. **Plant and machinery account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2021	Balance b/d	**10,000,000**	31st Dec., 2021	Realisation	**10,000,000**

Dr. **Receivables account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2021	Balance b/d	**18,000,000**	31st Dec., 2021	Realisation	**18,000,000**

Dr. **Inventory account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2021	Balance b/d	**11,000,000**	31st Dec., 2021	Realisation	**11,000,000**

Dr. **Payables account** **Cr.**

Date	Details	TZS	Date	Details	
31st Dec., 2021	Realisation *(discount)*	300,000	31st Dec., 2021	Balance b/d	12,000,000
	Relisation *(allowance on payables)*	1,700,000			
	Bank	10,000,000			
		12,000,000			**12,000,000**

Dr. **Mortgage loan from TMRC accounts** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2021	A's capital	**20,000,000**	31st Dec., 2021	Balance b/d	**20,000,000**

Workings

Based on Garner versus Murray rule, the ratio of last balances of solvent partners A and B is (21,900,000: 14,600,000) = (21.9: 14.6). This should be used to share deficiency balance of the insolvent partner.

A's capital account	21,900,000	21.9	21.9 × 1,800,000/36.5 = 1,080,000
B's capital account	14,600,000	14.6	14.6 × 1,800,000/36.5 = 720,000
Total	**36,500,000**	**36.5**	**1,800,000**

Exercise 1.5

1. Naiman, Odriano and Pascal share profits and losses equally. On completion of the intended venture, they decided to dissolve the partnership. They have presented the following statement of financial position and additional information.

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Freehold property	100,000,000	
Plant and machinery	200,000,000	
Investment	40,000,000	340,000,000
Current assets		
Trade receivable	20,000,000	
Bank	40,000,000	60,000,000
Total assets		**400,000,000**
Capital and liabilities		
Capital accounts:		
- Naiman	72,000,000	
- Odriano	40,000,000	
- Pascal	28,000,000	140,000,000
Current liabilities		
Trade payable		200,000,000
Other payable		60,000,000
Total capital and liabilities		**400,000,000**

Amount realised from assets disposed were as follows:

Assets	TZS
Freehold property	50,000,000
Plant and machinery	40,000,000
Investment	50,000,000
Trade receivable	22,000,000

Dissolution expenses amounted to TZS 2,000,000.

Required: Assist the partners to prepare all necessary accounts to close the partnership firm.

2. The following is the statement of financial position for X, Y and Z who are equal partners as at 31st December, 2021.

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Furniture		16,500,000
Current assets		
Inventory		132,000,000
Account receivable		110,000,000
Bank		5,500,000
Total assets		**264,000,000**
Capital and liabilities		
Capital accounts:		
- X	27,500,000	
- Y	16,500,000	
- Z	(55,000,000)	(11,000,000)
X's loan		55,000,000
Bank loan		120,000,000
Account payable		100,000,000
Total capital and liabilities		**264,000,000**

Due to firm's inability to pay its creditors in time, it was agreed to dissolve the business on 31st December, 2021. X and Z cannot pay anything as they are declared insolvent. Y was able to contribute only TZS 8,250,000. The realisation exercise produced the following:

Details	**(TZS)**
Inventory	82,500,000
Account receivable	88,000,000
Furniture	5,500,000
Dissolution expenses	2,500,000

Required: Prepare accounts to close books of the partnership.

Accounting for amalgamation of partnerships

Amalgamation of partnership firms means two or more firms join together to form a new partnership firm. Amalgamation is initiated by firms with equal interests. The existing partnership firms are liquidated while the newly formed firm takes over the business of the liquidating firms. The old firms lose their independence and close their books of accounts. Books of accounts for the new firm are then opened. Amalgamation occurs in either of the following forms:

(a) A sole trader merges with another sole trader;
(b) A sole trader merges with partnership firm; or
(c) A partnership merges with another partnership firm.

Objectives of amalgamation

Firms decide to amalgamate to achieve the following objectives:

(a) To eliminate wasteful competition among the firms operating in the same industry;
(b) To reduce unnecessary expenses;
(c) To pool resources (both financial and physical); and
(d) To achieve maximum efficiency and economy in administration.

Upon amalgamation the following cautions should be taken into consideration:

(a) Each statement of financial position of the amalgamating firms should present a true and fair view of the affairs of its business;
(b) Assets must be stated at their fair value and all liabilities to be fully disclosed. Goodwill of the businesses must be assessed accordingly at the time of amalgamation by making the right allowances to compensate the owner of the more valuable business. Closing entries are passed in the books of the old firms that are merged into a new firm; and
(c) The statement of financial position of the new partnership firm should be drafted taking into consideration the adjustment agreed upon to make the statements of the old firms portray true and fair view of their affairs.

Accounting entries to record amalgamation

When partnership firms are amalgamated, the books of old firms are closed and books of the new firm are opened. Revaluation account is opened for each firm. The accounting entries are:

S/N	Transactions	Accounting entries		
1.	When assets increase in value:	Dr. Assets account Cr. Revaluation account	xx	 xx
2.	When assets decrease in value:	Dr. Revaluation account Cr. Asset account	xx	 xx
3.	When liabilities increase in value:	Dr. Revaluation Account Cr. Liability account	xx	 xx
4.	When liabilities decrease in value:	Dr. Liability account Cr. Revaluation account	xx	 xx
5.	To transfer revaluation profit to partners' capital account in profit sharing ratio:	Dr. Revaluation account Cr. Partners' capital account	xx	 xx
6.	To transfer revaluation loss to partners' capital account in profit sharing ratio:	Dr. Partners' capital account Cr. Revaluation account	xx	 xx
Transfer of assets and liabilities to new firm: A new firm account is opened where the revised value of the assets and liabilities taken over by the new firm are transferred. The following entries will be made:				
7.	Assets taken over at revised values:	Dr. New firm's account Cr. Asset account	xx	 xx
8.	Liabilities taken over at revised values:	Dr. Liability account Cr. New firm's account	xx	 xx

The assets and liabilities of the amalgamating firms which are not taken over by the new firm are transferred to the Partners' Capital Accounts in capital ratio. It is also possible for the partners merging firms to sell the assets, by realising in cash and use the realised cash to pay the liabilities. In case the assets or liabilities are not taken over by the new firm, they will be sold away or paid off. Any profit or loss on such transaction will be transferred to capital account in profit sharing ratio. Under this case, the accounting entries are as follows:

S/N	Transactions	Accounting entries
1.	For assets not taken over by new firms (assets taken over by partners):	Dr. Partners' capital account xx Cr. Asset account xx
2.	For liabilities not taken over by new firms (liabilities taken over by partners):	Dr. Liabilities account xx Cr. Partners' capital account xx

Accumulated profits or losses

The accumulated profit or loss, if any, in the old firms should be transferred to the Partners' Capital Accounts in profit sharing ratio. For convenience in the distribution of profit or loss, reserves might be transferred to revaluation account first instead of directly to the capital accounts. The accounting entries will be:

S/N	Transactions	Accounting entries
1.	Transferring the profit/loss and reserves to the partners' capital accounts	Dr. Profit or loss account xx Dr. Reserve account xx Cr. Partners' capital account xx
2.	In case goodwill is valued, it should be raised in the books of existing firm through:	Dr. Goodwill account xx Cr. Partners' capital account xx
3.	The partners' capital accounts are finally closed by:	Dr. Partners' capital account xx Cr. New firms' account xx

After the amalgamation process is completed, the new firm prepares opening statement of financial position to present assets, liabilities and equity of the new partnership firm. The accounting treatments are as follows:

S/N	Transactions	Accounting entries
1.	For assets and liabilities brought to the new firm	Dr. Asset account xx Cr. Liability account xx Cr. Partners' capital account xx
2.	When cash is brought to the new firm by partners	Dr. Cash account xx Cr. Partners' capital account xx
3.	In case cash is withdrawn by a partner	Dr. Partners' capital account xx Cr. Cash account xx

Example 1.16

The following are the statement of financial positions of Mariam and Neema who shared profits and losses equally and of Queen and Jamal who shared profits and losses in 3:2 respectively.

Mariam and Neema's statement of financial position as at 31st December, 2018

Details	**TZS**	**TZS**
Non-currents assets:		
Plant and machinery	2,000,000	
Furniture and fixture	1,000,000	3,000,000
Current assets		
Stock in trade	2,000,000	
Sundry debtors	2,000,000	
Cash in hand	1,000,000	5,000,000
Total assets		**8,000,000**
Capital and liabilities		
Capital accounts:		
- Mariam	3,000,000	
- Neema	2,000,000	5,000,000
Liabilities		
Current liabilities		
Creditors		3,000,000
Total capital and liabilities		**8,000,000**

Queen and Jamal's statement of financial position as at 31st December, 2018

Details	**TZS**	**TZS**
Non-currents assets:		
Investments	2,000,000	
Furniture and fixture	1,600,000	
Patents	3,400,000	7,000,000
Current assets		
Stock in trade	2,400,000	
Sundry debtors	1,400,000	
Cash in hand	1,000,000	4,800,000
Total assets		**11,800,000**

Capital accounts:		
- Queen	3,000,000	
- Jamal	2,000,000	5,000,000
Reserves		5,000,000
		10,000,000
Current liabilities		
Creditors		1,800,000
Total capital and liabilities		**11,800,000**

Both firms decided to amalgamate themselves with effect from 1st January, 2019, and the new firm was named as MNQJ Supplies. They agreed to revalue their assets and liabilities as follows:

Details	**Mariam and Neema**	**Queen and Jamal**
Plant and machinery	1,600,000	-
Stock	1,800,000	2,200,000
Sundry debtors	1,680,000	1,200,000
Patents	-	3,000,000
Furniture and fixture	-	1,400,000
Goodwill	1,200,000	1,000,000

The new profits or losses sharing ratio between Mariam, Neema, Queen and Jamal are 3:3:2:2 respectively.

You are required to prepare:

(i) Journal entries in the books of Mariam and Neema necessary to adjust firm's books prior to amalgamation;

(ii) Journal entries in the books of Queen and Jamal necessary to adjust firm's books prior to amalgamation;

(iii) Revaluation account in the book of Mariam and Neema;

(iv) Capital accounts of Mariam and Neema;

(v) Revaluation account in the books of Queen and Jamal;

(vi) Capital accounts of Queen and Jamal; and

(vii) Statement of financial position of the new firm of MNQJ supplies.

Solution

(i) **Journal entries in the books of Mariam and Neema**

Details	Dr.	Cr.
Revaluation account Plant and machinery account Stock account Sundry debtors account *(Being reduction in value of assets)*	920,000	 400,000 200,000 320,000
Goodwill account Revaluation account *(Being valuation of goodwill)*	1,200,000	 1,200,000
Revaluation account Partners' capital accounts: - Mary - Neema *(Being profit on revaluation)*	280,000	 140,000 140,000
MNQJ supplies Plant and machinery account Furniture and fixture account Stock account Sundry debtors account Cash account *(Being transfer of assets to the new firm)*	7,080,000	 1,600,000 1,000,000 1,800,000 1,680,000 1,000,000
Creditors account MNQJ supplies *(Being transfer of liabilities to the new firm)*	3,000,000	 3,000,000
Partners' capital accounts: - Mariam - Neema MNQJ Supplies *(Being transfer of capital to the new firm)*	 3,140,000 2,140,000	 5,280,000

(ii) **Journal entries in the books of Queen and Jamal**

Details	Dr.	Cr.
Revaluation Account	1,000,000	
Furniture and fixtures account		200,000
Patents account		400,000
Stock account		200,000
Sundry debtors account		200,000
(Being reduction in value of assets)		
Goodwill account	1,000,000	
Revaluation account		1,000,000
(Being valuation of goodwill)		
Reserves account	5,000,000	
Queen's capital		3,000,000
Jamal's capital		2,000,000
(Being transfer of reserves)		
MNPQ supplies	10,800,000	
Furniture and fixture account		1,400,000
Investments		2,000,000
Patents account		3,000,000
Stock account		2,200,000
Sundry debtors account		1,200,000
Cash account		1,000,000
(Being transfer of assets to the new firm)		
Creditors account	1,800,000	
MNQJ supplies		1,800,000
(Being transfer of liabilities to the new firm)		
Partners' capital accounts:		
- Queen	6,000,000	
- Jamal	4,000,000	
MNQJ supplies		10,000,000
(Being transfer of capital to the new firm)		

(iii) **In the books of Mariam and Neema**

Dr. **Revaluation account** **Cr.**

Details	**TZS**	**Details**	**TZS**
Plant and machinery	400,000	Goodwill	
Stock	200,000		1,200,000
Sundry debtors	320,000		
Capital accounts:			
- Mariam	140,000		
- Neema	140,000		
	1,200,000		**1,200,000**

Dr. **Partners' capital accounts** **Cr.**

Details	**Mariam**	**Neema**	**Details**	**Mariam**	**Neema**
Balance c/d	3,140,000	2,140,000	Balance b/d	3,000,000	2,000,000
(Transfer to new firm)			Revaluation	140,000	140,000
	3,140,000	**2,140,000**		**3,140,000**	**2,140,000**

(iii) **In the books of Queen and Jamal**

Dr. **Revaluation account** **Cr.**

Details	**TZS**	**Details**	**TZS**
Furniture and fixtures	200,000	Goodwill	1,000,000
Sundry debtors	200,000		
Stock	200,000		
Patents	400,000		
	1,000,000		**1,000,000**

Dr. **Partners' capital account** **Cr.**

Details	Queen	Jamal	Details	Queen	Jamal
Balance c/d (Transfer to new firm)	5,000,000	5,000,000	Balance b/d Reserves	2,000,000 3,000,000	3,000,000 2,000,000
	5,000,000	**5,000,000**		**5,000,000**	**5,000,000**

MNQJ Supplies

Statement of financial position as at 1st January, 2019

Details	TZS	TZS
Non-currents assets		
Plant and machinery	1,600,000	
Furniture	2,400,000	
Investments	2,000,000	
Patents	3,000,000	
Goodwill	2,200,000	11,200,000
Current assets		
Stock	4,000,000	
Debtors	2,880,000	
Cash in hand	2,000,000	8,880,000
Total assets		**20,080,000**
Capital and liabilities		
Capital accounts:		
- Mariam	3,140,000	
- Neema	2,140,000	
- Queen	5,000,000	
- Jamal	5,000,000	15,280,000
Liabilities		
Current liabilities		
Creditors		4,800,000
Total capital and liabilities		**20,080,000**

Exercise 1.6

1. Explain the application of Garner versus Murray rule in insolvents of a partner.
2. Explain the reasons for amalgamation of partnership firms.
3. Explain the forms under which businesses can amalgamate.
4. Kajuna, Dennis and Penina share profit in the ratio 2:2:1 respectively. They amalgamated with Mwandoya on 30th April, 2020, to form Mwendokasi Enterprises. Their statement of financial positions before amalgamation, and terms of amalgamation are provided as follows:

Kajuna, Dennis and Penina's Statement of financial position as at 30th April, 2020

Details	**TZS '000'**	**TZS '000'**
Non-currents assets		
Premises	600,000	
Plant	360,000	960,000
Current assets		
Stock	600,000	
Bank	440,000	
Debtors	700,000	1,740,000
Total assets		**2,700,000**
Capital and liabilities		
Capital accounts:		
- Kajuna	800,000	
- Dennis	600,000	
- Penina	400,000	1,800,000
Current liabilities		
Creditors		900,000
Total capital and liabilities		**2,700,000**

Mwandoya's statement of financial position as at 30th April, 2020

Details	**TZS '000'**	**TZS '000'**
Non-currents assets		
Plant		240,000
Current assets		
Stock	250,000	
Debtors	360,000	610,000
Total assets		**850,000**
Capital and liabilities		
Capital account		300,000
Current liabilities		
Creditors	200,000	
Bank overdraft	350,000	550,000
Total capital and liabilities		**850,000**

The terms of amalgamation were:

(a) Profit to be shared equally;

(b) Goodwill for Kajuna, Dennis and Penina is TZS 1,000,000,000; while for Mwandoya is TZS 400,000,000;

(c) The new partnership took over all assets and liabilities and discharged the bank overdraft; and certain assets were revalued as:

Assets	**Kajuna, Dennis and Penina TZS '000'**	**Mwandoya TZS '000'**
Premises	800,000	-
Plant	320,000	290,000
Debtors	650,000	316,000

The capital was to be TZS 2,000,000,000 to be distributed equally and any surplus or deficit being transferred to current account; and no goodwill account is to be maintained in the books.

Required: Close the books of old partnership firms and open the books of the new firm.

Accounting for retirement or death of a partner

Withdrawal of a partner from the partnership with the consent of other partners or as per the provisions of the partnership deed or by giving notice of retirement is termed as retirement of a partner. A partner can also die and therefore effectively withdrawn from the partnership.

Retirement or death of a partner leads to reconstitution of a partnership firm as the original agreement between the partners comes to an end. The remaining partners may decide to continue with the business but with a new agreement. On retirement or death of a partner, the respective claims should be settled.

Rights of an outgoing partner on retirement or death

The outgoing partner is entitled to get his share of capital, interest on capital, share of profit etc. up to the date of his retirement or death. Similarly, he is liable for his share of all the losses like accumulated loss, revaluation loss, drawings, interest on drawings, and share of current year's loss up to the date of retirement or death. An outgoing partner is not liable for any loss incurred by the firm after his retirement or death. When a partner retires, his share in the firm is to be correctly ascertained and settled and therefore necessary adjustments have to be done on the same principles as in case of admission. Adjustments will be required for:

(a) Valuation and treatment of goodwill;

(b) Revaluation of assets and liabilities;

(c) Distribution of past reserves, profits or losses kept aside;

(d) Ascertainment of profit or loss up to the date of retirement or death (accrued profits or losses);

(e) Treatment of joint life policy; and

(f) Settlement of retiring or deceased partner's account.

Accounting treatment for goodwill in case a partner retires or dies

When goodwill does not appear in the books:

S/N	Transaction	Accounting entries	Narration
1.	When goodwill is raised at its full value and goodwill account is maintained	Dr. Goodwill account Cr. Partners' capital accounts	Goodwill raised at full value on retirement or death (in old ratio)
2.	When goodwill is raised at its full value at the time of retirement but written off afterwards	Dr. Goodwill account Cr. Partners' capital accounts	Goodwill raised at full value (in old ratio)
		Dr. Continuing partners' capital accounts Cr. Goodwill account	Full goodwill account written off (in new ratio)
3.	When goodwill is raised only to the extent of retired or deceased partner's share and goodwill account is maintained	Dr. Goodwill account *(only retiring partner's share)* Cr. Retiring partner's capital account	Retiring or deceased partner's share credited to his account
4.	When goodwill is raised only to the extent of share of retiring or deceased partner but written off	Dr. Goodwill account Cr. Retiring partner's capital account	Retiring partner's share of goodwill credited to his account
		Dr. Continuing partner's Cr. Goodwill account	Goodwill written off in "benefit ratio"
5.	When retiring partner's share of Goodwill is to be given without raising or recording it	Dr. Continuing partner's Cr. Retiring partner account	Retiring partner's share of goodwill debited to other Partners in benefit ratio

When goodwill appears in the books:

S/N	Transaction	Accounting entries	Narration
1.	If goodwill appears at correct value	No entry	No narration
2.	If goodwill appears at less than full value	Dr. Goodwill account Cr. All partners' capital account	Difference in full value and book value raised
3.	If goodwill appears at more than full value	Dr. All partners account Cr. Goodwill account	Difference between book value and full value cancelled

Note: Valuation of goodwill is to be made in the same manner as in case of admission.

Revaluation of assets and liabilities

Assets and liabilities of the firm should be carefully revalued on the same principles as in case of admission. The result of such revaluation is transferred to all the partners in their old ratios. If continuing partners wish to maintain the assets and liabilities at their original value, the Memorandum Revaluation method is to be followed and the result of reversal entries is transferred to continuing partners in their new ratios.

Distribution of reserves and accumulated profits

If there are any reserves or undistributed profits at the time of retirement or death, they must be transferred to all partners by 'debiting such reserves and profit and loss accounts' and 'crediting all partner's accounts in old ratio'. Sometimes, such reserves or profits are transferred to the partners through 'revaluation account'. If the continuing partners wish to maintain the reserves or profits in the continuing firm, then only retiring partner's share is transferred to his account.

Accrued profit or loss up to the date of retirement or death

A retiring partner or executor of a deceased partner is entitled to the share in profit (or loss) up to the date of retirement or death. Retirement or death may not take place exactly on the date of last day of the financial year. Thus, profit or loss from the date of last statement of financial position to the actual date of retirement is to be calculated and recorded properly.

Usually, calculation of such profit or loss is made on the basis of either the average profit of certain number of past years or on the basis of the profit of the year immediately preceding to the year of retirement or death. The total profit of the business is calculated up to the date of retirement or death out of which only outgoing partner's share is recorded as follows:

S/N	Details	Journal entries
1.	Recording the outgoing partner's share of profit up to the date of retirement	Dr. Profit or loss suspense account Cr. Outgoing partner's capital account
2.	Recording the outgoing partner's share of loss up to the date of retirement recorded	Dr. Outgoing partner's capital account Cr. Profit or loss suspense account

Note: Suspense account is finally transferred to profit or loss account at the end of accounting year. Before this process, it will be appearing in the statement of financial position of continuing partners.

Treatment of joint life policy

A joint life policy is a life insurance policy for two persons, especially spouses with a common purpose of providing necessary security by shifting risks and with a view to provide necessary funds which may be needed at the time of death of a partner.

An assurance policy is taken on the joint lives of all the partners', so that even if one of the partners die, the firm gets the full value of the policy which can be very well used to settle the account of the executor of the deceased without disturbing the position of the business.

Settlement of retiring or deceased partner's account

Once the retiring or deceased partner's share in the firm is ascertained, the amount payable to him is transferred to a separate "loan account" in case of retiring partner and to a deceased partner's executor's (or dependent's) account, in case of deceased partner. Such 'Loan' or 'Executor's' account is either settled immediately or in instalments depending upon the relations and financial position of the business. Generally, such loan or executor's account carry certain percentage of interest.

Benefit ratio in treating outgoing partner's goodwill

On the death or retirement of a partner, his share in the profit will be taken by the remaining partners. Therefore, such partner's capital is credited for his share in goodwill, and this is to be contributed by the remaining partners in the ratio in which they get the additional share in profits, i.e., in the benefit ratio. The following table explains how to calculate the same.

Calculation of the benefit ratio and the new ratio of the remaining partners

S/N	Condition	Ratio between remaining partners	
		New ratio	Benefit ratio
1.	When new ratio is given	As given in the question	New ratio - old ratio
2.	When New Ratio is not given	The same old ratios between them	The same old ratios between them
3.	When benefit ratio is given	Old ratio + benefit ratio	As given in the question/scenario

NOTE: Calculation of the benefit ratio will be necessary only when the outgoing partner's share in the goodwill is to be recorded and written off or if the goodwill is not recorded into books of accounts.

Example 1.17

Ashura, Benjamin and John were partners in a partnership firm with capitals of TZS 10,000,000, TZS 8,000,000 and TZS 6,000,000 respectively and sharing profits in the ratio of 3:2:1. On 31st December, 2021 Benjamin retired. For the purpose of retirement, the goodwill of the firm was valued at TZS 18,000,000. Assume that the assets of the partnership are fairly stated on the date of retirement and that there are no liabilities.

Required:

(a) Pass necessary journal entries;
(b) Prepare partners' capital accounts; and
(c) Prepare a statement of financial position as at 31st December, 2021.

In each of the above requirement consider the following circumstances:

(i) Goodwill is raised and maintained in the books.
(ii) Goodwill is raised but written off later.
(iii) Only Benjamin's share of goodwill is raised and maintained in the books.
(iv) Only Benjamin's share of goodwill is raised but later written off.
(v) Benjamin is given his share of goodwill without raising goodwill account.

Solution

(i) When goodwill is raised and maintained in the books:

Journal entry

Details	Dr.	Cr.
Goodwill account	18,000,000	-
Ashura's capital account	-	9,000,000
Benjamin's capital account	-	6,000,000
John's capital account	-	3,000,000
(Being goodwill raised at full values by the partners in their old profit sharing ratios)		

Workings:

Goodwill amount = TZS 18,000,000

Ashura $= \frac{3}{6} \times$ TZS 18,000,000 = TZS 9,000,000

Benjamin $= \frac{2}{6} \times$ TZS 18,000,000 = TZS 6,000,000

John $= \frac{1}{6} \times$ TZS 18,000,000 = TZS 3,000,000

Dr. **Partners' capital accounts** **Cr.**

Details	Ashura	Benjamin	John	Details	Ashura	Benjamin	John
Loan	-	14,000,000	-	Balance b/d	10,000,000	8,000,000	6,000,000
Balance c/d	19,000,000	-	9,000,000	Goodwill	9,000,000	6,000,000	3,000,000
	19,000,000	**14,000,000**	**9,000,000**		**19,000,000**	**14,000,000**	**9,000,000**

Statement of financial position of Ashura and John after retirement of Benjamin

Details	TZS	TZS
Assets		24,000,000
Goodwill (new raised)		18,000,000
Total of assets		**42,000,000**
Capital:		
- Ashura	19,000,000	
- John	9,000,000	28,000,000
Benjamin's loan		14,000,000
Total of capital and liabilities		**42,000,000**

Note: The total of the capitals of Ashura, John and Benjamin before Benjamin's retirement is TZS 24,000,000. Hence the assets of the old business must be TZS 24,000,000.

(ii) When total goodwill is raised but written off later:

Journal entries

Details	Dr.	Cr.
Goodwill account	18,000,000	-
Ashura's capital account	-	9,000,000
Benjamin's capital account	-	6,000,000
John's capital account	-	3,000,000
(Being goodwill raised at full values by partners in old sharing ratios)		
Ashura's capital account	13,500,000	-
John's capital account	4,500,000	-
Goodwill account	-	18,000,000
(Being goodwill written off from the books of continuing firm in new profit-sharing ratios)		

Dr. **Partners' capital accounts** **Cr.**

Details	Ashura	Benjamin	John	Details	Ashura	Benjamin	John
Loan	-	14,000,000	-	Bal. B/d	10,000,000	8,000,000	6,000,000
Goodwill *(written-off)*	13,500,000	-	4,500,000	Goodwill *(Raised)*	9,000,000	6,000,000	3,000,000
Balance c/d	5,500,000	-	4,500,000				
	19,000,000	**14,000,000**	**9,000,000**		**19,000,000**	**14,000,000**	**9,000,000**

Statement of financial position of Ashura and John after retirement of Benjamin

Details	TZS	TZS
Total Assets		**24,000,000**
Capital accounts:		
- Ashura	5,500,000	
- John	4,500,000	10,000,000
Liabilities		
- Benjamin's loan		14,000,000
Total capital and liabilities		**24,000,000**

(iii) When only Benjamin's share of goodwill is raised and maintained in the books:

Journal entry

Details	Dr.	Cr.
Goodwill account	6,000,000	-
Benjamin's capital account	-	6,000,000
(Being Benjamin's share of goodwill raised in the books)		

Dr. **Partners' capital account** **Cr.**

Details	Ashura	Benjamin	John	Details	Ashura	Benjamin	John
Loan	-	14,000,000	-	Balance B/d	10,000,000	8,000,000	6,000,000
Balance c/d	10,000,000	-	6,000,000	Goodwill (Benjamin)	-	6,000,000	-
	10,000,000	**14,000,000**	**6,000,000**		**10,000,000**	**14,000,000**	**6,000,000**

Statement of financial position of Ashura and John after retirement of Benjamin

Details	TZS	TZS
Assets		
Non-current assets		24,000,000
Goodwill (only retiring partner's share)		6,000,000
Total Assets		**30,000,000**
Capital accounts:		
- Ashura	10,000,000	
- John	6,000,000	16,000,000
Liabilities		
Benjamin's loan		14,000,000
Total capital and liabilities		**30,000,000**

(iv) When only Benjamin's share of goodwill is raised but later written off:

Journal entries

Details	Dr.	Cr.
Goodwill account	6,000,000	-
Benjamin's capital account	-	6,000,000
(Being Benjamin's share of goodwill raised in the books)		
Capital accounts:		
- Ashura	4,500,000	
- John	1,500,000	
Goodwill account		6,000,000
(Being Benjamin's share of goodwill written off using benefit ratios)		

Dr. **Capital account** **Cr.**

Details	Ashura	Benjamin	John	Details	Ashura	Benjamin	John
Loan	-	14,000,000	-	Balance b/d	10,000,000	8,000,000	6,000,000
Goodwill *(written off)*	4,500,000	-	1,500,000	Goodwill *(Benjamin share)*	-	6,000,000	-
Balance c/d	5,500,000	-	4,500,000				
	10,000,000	**14,000,000**	**6,000,000**		**10,000,000**	**14,000,000**	**6,000,000**
				Balance b/d	5,500,000	-	4,500,000

Statement of financial position of Ashura and John after retirement of Benjamin

Details	TZS	TZS
Non-current assets		24,000,000
		24,000,000
Capital accounts:		
- Ashura (TZS 10,000,000 - 4,500,000)	5,500,000	
- John (TZS 6,000,000 - 1,500,000)	4,500,000	10,000,000
Liabilities		
Benjamin's loan		14,000,000
Total capital and liabilities		**24,000,000**

(v) When Benjamin is given his share of goodwill without raising it in the books:

Journal entries

Details	Dr.	Cr.
Ashura's capital account	4,500,000	
John's capital account	1,500,000	
Benjamin's capital account		6,000,000
(Being, Benjamin's share of goodwill adjusted to continuing partner's capital accounts in their profit 'Benefit' Ratio)		

Dr. **Capital accounts** **Cr.**

Details	Ashura	Benjamin	John	Details	Ashura	Benjamin	John
Benjamin's loan	-	14,000,000	-	Balance b/d	10,000,000	8,000,000	6,000,000
Goodwill *(written off)*	4,500,000	-	1,500,000	Ashura	-	4,500,000	-
				John	-	1,500,000	-
Balance c/d	5,500,000	-	4,500,000				
	10,000,000	**14,000,000**	**6,000,000**		**10,000,000**	**14,000,000**	**6,000,000**
				Balance b/d	5,500,000	-	4,500,000

Statement of financial position of Ashura and John after retirement of Benjamin

Details	TZS	TZS
Non-current assets		24,000,000
Total Assets		**24,000,000**
Capital accounts:		
- Ashura (TZS 10,000,000 - 4,500,000)	5,500,000	
- John (TZS 6,000,000 - 1,500,000)	4,500,000	10,000,000
Liabilities		
Benjamin's loan account		14,000,000
Total capital and liabilities		**24,000,000**

Note: Benjamin's share of goodwill is purchased by Ashura and John in the ratio of 3:1. Hence their capitals are debited to the extent of TZS 6,000,000 in the ratio of 3:1 and credit is given to Benjamin for his share of goodwill.

In all of the above cases, Benjamin, the retiring partner gets his share of goodwill (1/3 of TZS 18,000,000) = TZS 6,000,000. His capital balance along with share of goodwill is to be transferred to his loan account by debiting capital account.

Example 1.18

Rose, Said and Grace were partners sharing profits and losses in the ratio 3:2:1. Their statement of financial position on 31st December, 2020 was as follows:

Statement of financial position of Rose, Said and Grace as at 31st December, 2020

Details	**TZS ‘000’**	**TZS ‘000’R**
Non-current assets		
Building	25,000	
Furniture	2,000	27,000
Current assets		
Inventory	5,000	
Debtors	6,000	
Investments	6,500	
Bills receivable	2,000	
Cash at bank	3,500	23,000
Total assets		**50,000**
Capital accounts:		
- Rose		10,000
- Said		10,000
- Grace		10,000
Liabilities		
Sundry creditors	15,000	
Bills payable	5,000	20,000
Total capital and liabilities		**50,000**

Grace retired on 31st December, 2020 and the partners agreed that:

(a) Goodwill should be calculated on the basis of two years' profits of the average of the preceding three years' profits. The profits for the years 2017, 2018 and 2019 were TZS 10,000,000, TZS 12,000,000 and TZS 14,000,000 respectively;

(b) TZS 510,000 be provided for doubtful debts;

(c) Inventory be reduced by 10%; and

(d) There was to be an appreciation of 5% in the value of buildings.

You are required to prepare:

(i) Revaluation account;
(ii) Partners' capital accounts; and
(iii) Statement of financial position of continuing partners.

Solution:

Total profit of the three years: TZS 10,000,000 + 12,000,000 + 14,000,000
= TZS 36,000,000
Average profit for three years: TZS 36,000,000 ÷ 3
= TZS 12,000,000
But goodwill is based on two years' purchase of the average profits
= TZS 12,000,000 × 2
Therefore: Goodwill = TZS 24,000,000

On the occasion of the retirement, either the total goodwill can be raised in the books or only the retiring partner's share of goodwill can be considered.

Dr. **Revaluation account** **Cr.**

Details	TZS	Details	TZS
Debtors	510,000	Building	1,250,000
Inventory	500,000	(appreciation)	
(10% of TZS 5,000,00)			
Capital accounts:			
- Rose	120,000		
(3/6 of TZS 24,000,000)			
- Said	80,000		
(2/6 of TZS 24,000,000)			
- Grace	40,000		
(1/6 of TZS 24,000,000)			
	1,250,000		**1,250,000**

Building appreciation (5% of TZS 25,000,000)

Dr. **Capital accounts** **Cr.**

Details	Rose	Said	Grace	Details	Rose	Said	Grace
Loan	-	-	14,040,000	Balance B/d	10,000,000	10,000,000	10,000,000
Balance c/d	22,120,000	18,080,000	-	Goodwill	12,000,000	8,000,000	4,000,000
				Revaluation	120,000	80,000	40,000
	22,120,000	**18,080,000**	**14,040,000**		**22,120,000**	**18,080,000**	**14,040,000**

Statement of financial position of Rose and Said after retirement of Grace

Details	TZS '000'	TZS '000'
Non- current assets		
Buildings (appreciated)	26,250	
Furniture	2,000	
Goodwill (raised)	24,000	52,250
Current assets		
Inventories*	4,500	
Debtors**	5,490	
Investments	6,500	
Bills receivable	2,000	
Cash at bank	3,500	21,990
Total assets		**74,240**
Capital and liabilities		
Capitals accounts:		
- Rose		22,120
- Said		18,080
Liabilities		
Loan account (Grace)		14,040
Sundry creditors		15,000
Bills payable		5,000
Total capital and liabilities		**74,240**

* Inventory is reduced by 10%

= TZS 5,000,000 - 500,000

= **TZS 4,500,000**

** Provision for doubtful debts is TZS 520,000,
Hence, remaining debtors

= TZS 6,000,000 - 510,000

= **TZS 5,490,000**

Exercise 1.7

1. Nuria, Rukia and Asia are partners sharing profits in the ratio of 4/10, 3/10, 3/10 respectively. Catherine retires from the business. Aneth and Beatrice decide to share future profits equally.

   Required: Calculate the gaining ratio of Aneth and Beatrice.

2. Ally, Omary, Yusuph, Mohamed and Halid are partners in a firm sharing profits in the ratio of 7:5:3:3:2 respectively. Yusuph retires from the business. The profit-sharing ratio as agreed by the remaining partners Ally, Omary, Mohamed and Halid is 6:5:5:4, respectively. **Required:** Calculate the gaining ratio of remaining partners.

3. Anita, Bertha, Clara and Donald are equal partners. The goodwill of the firm is valued at TZS 600,000. Anita retires from business. The new profit-sharing ratio of Bertha, Clara and Donald is agreed at 5:4:3 respectively.
   Required: Record the necessary journal entry assuming that goodwill account is raised and retained in the books.

Chapter summary

1. A partnership is a relationship which consists of two or more persons with unlimited liability, carrying on a business in common, with a view of making profit.
2. Goodwill is the good name or good reputation of the business which brings benefit to the business concerned. An old and well-established business entity develops good name and reputation over a period of time. This may be caused by various factors such as: good quality of goods and services provided; location of the business; reliability of supply; competitive prices; and better customer service.
3. In case of partnership firms, whenever there is a change in the mutual rights of partners, the need for valuation of goodwill arises. Circumstances that require valuation of goodwill of partnership firms include: change in the profit-sharing ratio amongst the existing partners; admission of a new partner; retirement of a partner; death of a partner; dissolution of a firm; and amalgamation of partnership firms.

4. Normally, goodwill of a partnership business is calculated using either average profit method; super profit method; or capitalization method.

5. Revaluation of partnership assets is the process of determining the current value of assets in a partnership business. This process is necessary when: a new partner is admitted; a partner leaves the firm; there is a change in profit or loss sharing ratios; and when a business is sold.

6. A partnership is dissolved when: there is a change in profit sharing ratio among partners; a new partner is admitted; or when a partner dies or retires. A dissolution may be voluntary, by agreement among the partners or compulsory (when a partner retires, dies, become insolvent or insane). Also when: a partner gives a notice in writing to the other partners signifying his intention of seeking dissolution of the firm; the court may order dissolution when a partner becomes permanently incapable of performing the duties as a partner; a partner deliberately and consistently commits breach of agreements relating to management of the firm and partner transfers all the interest in the firm to a third party.

7. Amalgamation of partnership firms occurs when two or more firms join together to form a new partnership firm. The existing partnership firms are liquidated to form a firm. Amalgamation can occur when: a sole trader merges with another sole trader; a sole trader merges with partnership firm; or when a partnership merges with another partnership firm. Amalgamations are done to: eliminate wasteful competition among the companies operating in the same industry; reduce unnecessary expenses; or pooling the resources (both financial and physical).

8. Retirement of a partner refers to withdrawal of a partner from the partnership with the consent of other partners or as per the provisions of the partnership deed or by giving notice of retirement. When a partner retires, his share in the partnership firm is to be correctly ascertained and settled. Then, necessary adjustments should be done in respect of: valuation and treatment of goodwill; revaluation of assets and liabilities; ascertainment and distribution of past reserves, profits or losses, up to the date of retirement or death.

Revision exercise

1. Kulwa, Doto and Chacha are in partnership sharing profits and losses in the proportions of 2:3:3, respectively. Their position as at 30 September, 2021 was as follows:

Statement of financial position as at 30th September, 2021

Details	TZS	TZS
Non-current assets		
Buildings	12,180,000	
Furniture	2,940,000	15,120,000
Current assets		
Inventory	14,700,000	
Accounts receivable	27,090,000	41,790,000
Total assets		**56,910,000**
Capital and liabilities		
Capital accounts:		
- Kulwa		8,400,000
- Doto		11,340,000
- Chacha		`12,600,000
Reserve		6,720,000
Current liabilities		
Accounts payable	16,800,000	
Bank overdraft	1,050,000	17,850,000
Total capital and liabilities		**56,910,000**

On 1st October, 2021 they admitted Dingo into partnership for 1/4 share on the following terms:

(a) Dingo to bring TZS 10,500,000 as capital.
(b) A goodwill is raised at TZS 16,800,000.
(c) The value of inventory to be reduced by 10%.
(d) Buildings to be appreciated by 15%.
(e) A provision for doubtful debts of TZS 1,680,000 to be made.
(f) After Dingo admission in the firm, goodwill account should be written off.

Required:

Show the adjusted statement of financial position of the firm after admission of Dingo assuming:

(i) The partners wish to retain the assets at their revised valuations.

(ii) The assets are to be reflected in the statement of financial position at their original values.

2. The statement of financial position as at 31st December, 2021 of A, B and C who are the partners sharing profit and loss in the ratio of 2:1:1 is given as follows:

Statement of financial position as at 31st December, 2021

Details	TZS	TZS
Non-current assets		
Plant and machinery	120,000,000	
Motor vehicles	60,000,000	
Furniture and fittings	40,000,000	220,000,000
Current assets		
Inventory	70,000,000	
Account receivables	9,000,000	
Cash	1,000,000	80,000,000
Total assets		**300,000,000**
Total capital and liabilities		
Capital accounts:		
- A	100,000,000	
- B	60,000,000	
- C	40,000,000	200,000,000
Current accounts:		
- A	10,000,000	
- B	10,000,000	
- C	(10,000,000)	10,000,000
Capital reserves		40,000,000
Account payable		50,000,000
Total capital and liabilities		**300,000,000**

The partners decided to dissolve the firm as on 1st January, 2022 and use the proceeds from realisation to settle liabilities of the partnership. Additionally:

(a) On 1st January, 2022, account receivable realised TZS 4,000,000, inventory realised TZS 41,000,000, account payables were settled and cost realisation was expected to be TZS 5, 500,000

(b) On 20th January, 2022, plant and machinery was sold for TZS 70,000,000

(c) On 28th February, 2022; Motor vehicles sold for TZS 25,000,000, furniture and fittings realised TZS 15, 000,000, cost of realisation was paid for TZS 4,000,000.

Required: Prepare all necessary accounts to close the partnership firm.

3. Kelvin, Doreen and Pendo carried on a manufacturing business as partners sharing profit and loss in the ratio of 2:2:1 respectively. They agreed to amalgamate with Michael on 30th April, 2021 who carried on similar business. The summarized statement of financial position of the two firms as at 30th April, 2021 was as follows:

Statement of financial position of Michael, as at 30th April, 2021

Details	TZS '000'	TZS '000'
Non-currents assets		
Plant and machinery		24,000
Current assets		
Stock	25,000	
Debtors	36,000	61,000
Total assets		**85,000**
Capital and liabilities		
Capital		30,000
Current liabilities		
Creditors	20,000	
Bank overdraft	35,000	55,000
Total capital and liabilities		**85,000**

Statement of financial position of Kelvin, Doreen and Pendo, as at 30th April, 2021

Details	TZS '000'	TZS '000'
Non-currents assets		
Premises	60,000	
Plant and machinery	36,000	96,000
Current assets		
Stock	60,000	
Debtors	70,000	
Bank	44,000	174,000
Total assets		**270,000**
Total capital and liabilities		
Capital accounts:		
- Kelvin	80,000	
- Doreen	60,000	
- Pendo	40,000	180,000
Current liabilities		
Creditors		90,000
Total capital and liabilities		**270,000**

The terms of amalgamation were as follows:

(a) Profit and losses were to be shared equally.

(b) The value of the goodwill was agreed at TZS 100,000,000 for the firm of Kelvin, Doreen and Pendo and TZS 40,000,000 for Michael.

(c) The new firm was to take over all the assets and liabilities of the two businesses and discharge the bank overdraft, but certain assets were revalued as follows:

Details	Kelvin, Doreen and Pendo TZS '000'	Michael TZS '000'
Premises	82,000	-
Plant and machinery	34,000	31,000
Debtors	70,000	33,600

Required: Prepare the following accounts:

(i) Revaluation accounts;

(ii) Partners' capital accounts; and

(iii) The opening statement of financial position of the new firm.

4. Makame, Ussi and Faki are partners sharing profit in the ratio 3: 2: 1. Makame retires from the partnership. To settle his claim, the following revaluation of assets and liabilities was agreed upon:
   (a) The value of machinery is increased by TZS 25,000,000;
   (b) The value of investment is increased by TZS 2,000,000;
   (c) A provision for outstanding bill in the books at TZS 1,000,000 is now not required; and
   (d) The value of land and building is decreased by TZS 12,000,000.

   Required:
   (i) Prepare all necessary journal entries to effect the revaluation on Makame's retirement; and
   (ii) Open up a revaluation account.

5. Lima, Panda and Vuna are partners sharing profits in the ratio 4:3:3 respectively. At the end of their fiscal year on 31st March, 2021 their trial balance was as follows:

Details	DR	CR
Equipment	23,000	
Stock	54,000	
Debtors	31,000	
Cash	14,000	
Creditors		70,000
Lima's capital 31/3/2010		50,000
Panda's capital 31/3/2010		30,000
Vuna's capital 31/3/2010		20,000
Lima's Drawings	12,000	
Panda's Drawings	8,000	
Vuna's Drawings	8,000	
Balance in the profit or loss account	20,000	
	170,000	**170,000**

Additionally, the following information were available:
   (a) The partners' agreement provides for annual salaries of TZS 12,000,000 each, and interest of 5% on capital as at March 31, 2010. It further states that no interest shall be charged on drawings up to 12,000,000 per year.
   (b) The partners terminate their agreement and liquidate the firm. Equipment were sold for TZS 10,000,000; stock for TZS 36,000,000; and debtors realized TZS 28,000,000.
   (c) Settlement is made with the partners according to the Garner Vs Murray rule.

You are required to prepare the following accounts to close the partnership firm:

(i) Profit or loss appropriation account.
(ii) Partnership realisation account.
(iii) Partner's capital accounts.
(iv) Cash book.

6. Anna and Bakari are in partnership sharing profits or losses at the ratio of 3:2. They had originally invested TZS 100,000,000 and TZS80,000,000 respectively. Their current account balances on 1st January, 2021 were TZS 28 000,000 credit for Anna; and TZS 9,900,000 debit for Bakari.

The partnership deed specifies the following agreements:

i) Payment of interest on drawings at the rate of 5% per annum.
ii) Payment of interest on capital at the rate of 3% per annum.
iii) Bakari is entitled to a salary of TZS 2,000,000 per month.

On 1st July 2021, Anna decided to retire and the following were the agreements to effect the retirement:

- Both partners agree to make valuation of their partnership business and any resulting goodwill be brought into the books.

- Anna agrees to leave TZS 60,000,000 of her capital as a loan to the business earning interest at the rate of 4% per annum and to withdraw the balance of what is owing to her.

- An independent expert valued the business and the resulting goodwill as at 1st July was TZS 108,000,000.

Required:

a) Prepare the profit or loss appropriation accounts for the year ended 31st December 2021.
b) Post to and balance the partners' current accounts.

Chapter Two

Payroll accounting

Introduction

Entities usually pay their employees as a way of compensation for the services they deliver, for a set period or on a given date. Before such compensations are effected, a list is prepared, showing the names of employees to be compensated and the amount of compensation due to each of them. This list is what is termed as payroll, and it is usually managed by the accounting and human resources departments of firms. In this chapter you will learn about the concept of payroll accounting, computation of employee's gross pay, and the calculation of various deductions from the employees' gross pay. You will also learn about the computation of the net pay and preparation of payroll accounts. The competencies developed will enable you to make various calculations and computations to arrive at a correct salary pay, and to account for such computations in the books of accounts.

Concept of payroll accounting

One of the duties of accounting department in any entity includes calculation of the accurate amount payable to each employee at the right time. The accounting process used to calculate the amount payable to employees is known as payroll accounting.

Payroll accounting is a system of recording and accounting for business expenses relating to payroll. These expenses include individual employee's remuneration, taxes payable, deductions and contributions to benefit schemes. It is essentially the calculation, management, recording, and analysis of employee's remuneration. Business entities have to maintain records of employees' benefits such as salaries and wages, and be able to pay regularly as per entity's policies. Amounts payable to part time employees based on a piece of work or on hourly rate are called wages while the amounts payable monthly to permanent employees are known as salaries. Wage is paid daily or weekly while salary is paid at the end of every month.

The preparation and dissemination of payroll information enables; employees to understand the matter concerning with his earnings and deductions; enables the management to utilize information obtained in the payroll in planning and controlling decision processes; and enables the government to enact legislation which impinge (have an effect) on employee's renumeration.

General considerations in employees' remuneration

There are number of factors that need to be considered when making decision on how to remunerate employees within the entity. It involves all aspects of paying compensation and benefits to employees. Generally, the decision relating to employees' remunerations include: fixed salary scales; rate of wages per hour; increase in salaries; and post-employment benefits. Higher salaries and wages may actually increase staff motivation which in turn increases productivity and quality of outputs. On the other hand, higher salaries of employees increase the costs of production which in turn reduces the profit of the firm. Therefore, the entities have to take into account the following considerations when making decisions regarding employees' remuneration:

(a) general wage levels in a country, sector or industry;
(b) level of employee's productivity;
(c) level of education and training of employees;
(d) incidence of fixed overhead in payroll; and
(e) impact of labour turnover and motivation.

Objectives of payroll accounting

Payroll accounting is the method of accounting for payroll from which the outcome of this process is precise process regarding the expenses associated with all types of compensation, as well as timely payments to employee. Payroll accounting is generally intended to achieve the following objectives:

(a) To provide accurate payment of remuneration to employee promptly;
(b) To produce and maintain the necessary employee and employer records, statements and any reports relevant to and required by government agencies and statutory fund management institutions;
(c) To prevent fraud; and
(d) To control the salaries and wages expenses.

Importance of payroll accounting

Payroll accounting is very important to the employers, employees and the government on the following grounds:

(a) Timely and accurate preparation of payroll records and payments helps to reduce payroll errors and irregularities, hence maintain good employees' moral and royalty.

(b) Payroll expenditures are subject to various government regulations. For example, in tax calculations, payrolls preparation allows identification of the tax bracket where the employee's salary falls.

(c) The payments for payroll and related taxes are deductions which have significant effect on the net income of an organisation. It is therefore very important to have an accurate system of handling payroll issues.

(d) In a way to comply with the rules and laws that affect the hiring and paying of employees, payroll accounting is an essential accounting activity for any organisation regardless of the number of workers it employs.

(e) Calculation of employees' earnings and related withholding taxes and other statutory deductions, serves as a basis for preparing the payroll tax returns and other deductions to be submitted to the respective tax revenue department.

Employee's earnings/compensation

Employee's earnings may include basic salary, gross incentives, allowances and commissions. These earnings are further explained in detail in the following sub-sections.

Employee's basic pay

Employee's remuneration usually takes the form of salary or wages. The amount of wages/salaries agreed to be payable to an employee as per contract of employment is basic pay. Basic pay is fixed at the time of employment before taking into account other forms of earnings such as overtime payments, allowances and other benefits.

Methods of employee's remuneration

Employee in an organisation may be remunerated in a number of forms. Often the basic pay to staff may involve a combination of two or more modes. The most common modes of remuneration are the following:

(a) Time based remuneration schemes: where a fixed rate per hour may be applied on a total number of hours worked, or it may be based on an agreed monthly or annual amount, example monthly salary.

(b) Piece based remuneration schemes: the payment under this scheme depends on the number of units produced by an employee. Some firms use to set a minimum amount of units to be produced by worker for a particular period of time, below which she/he may not get paid.

(c) Commission based remunerations: wages is paid as a percentage of the sales volume. An employee will therefore get paid based on the number of units sold by him/her.

Example: 2.1

Mr. Peter is employed by KWETU Social Club on part-time basis at a rate of TZS 40,000 per hour. During 2021, he worked for an average of 20 hours per month. You are required to calculate Peter's:

(i) Basic pay for the month of July, 2021.
(ii) Quarterly basic pay in 2021.
(iii) Annual basic pay for 2021.

Solution

(i) Computation of monthly basic pay for month of July 2021:

Basic pay = Rate per hour ×normal working hours worked

Rate per hour = TZS 40,000

Number of hours worked in a month = 20 hours.

Basic pay = TZS 40,000 × 20 hours

Peter's basic pay for July, 2021 = TZS 800,000

(ii) Computation of quarterly basic pay in the year 2021.

Quarterly basic pay = monthly basic pay × 3

From (i) above, monthly basic pay = TZS 800,000

Therefore, quarterly basic pay = TZS 800,000 × 3

Peter's quarterly basic pay in the year 2021 = TZS 2,400,000

(iii) Computation of basic annual pay for the year 2021

Basic annual pay = monthly basic pay × 12 months

From (i) above monthly basic pay = TZS 800,000

Therefore, annual basic pay = TZS 800,000 ×12

Peter's annual basic pay for the year 2021 = TZS 9,600,000

Exercise: 2.1

1. Mr. Ridhiwani is employed by ABC Company Ltd. as an assistant accountant since 1st July, 2019. She holds a Bachelor of Accountancy from a recognized Institute of Accountancy and business studies. Salary scales in ABC Company Limited are as follows:

Education qualification	Salary scale	Basic salary payable in TZS
Certificate	ASS 1.1	470,000
Diploma	ASS 2.1	637,000
Bachelor Degree	ASS 3.1	1,072,000

Required: Identify the basic salary for Mr. Ridhiwani.

2. On 1st January, 2020. James enters into two (2) years' contract of employment with PQ Ltd. The agreed basic pay amounted to TZS 1,600,000 per month. During the year 2021, James worked for three (3) months only, before terminating his contract.

Required: Calculate James's basic pay for the quarter ending 31st March, 2021.

3. JM Enterprise pays a monthly basic salary of TZS 2,500,000 for operational managers. Michael is one of the operational managers in JM Enterprise since 1st January, 2020.

   Required: Calculate Michael's annual basic salary for the year ended 31st December 2020.

Employee's gross pay

An employee is entitled to the amount of wages or salaries and other allowances. This amount is known as gross pay. Gross pay is the sum or total of basic pay, monetary benefits, entitlements and overtime payments. In some cases, bonuses may be paid on top of these 'normal' earnings. Bonus schemes vary widely and may depend on: amount of net profit made by the company, amount of work performed, quality of performance by the employee, production levels achieved either by the whole company or by the department in which the employee works. At times, these bonuses can result to a higher amount than an employee's 'normal' salary.

Allowances

On top of the basic pay, an employee might be entitled to additional payments as per employment agreement. These payments are known as allowances. Allowances given to employees vary from one firm to another and from one employee to another. These allowances include: transport allowance, meals allowance, medical allowance, house allowance, hardship allowance and any other additional payment as per employment agreement. Some of the benefits are exempted from tax and some are not.

Overtime payment

Arrangements for rewarding people for working overtime (time exceeding normal hours of work) varies widely. The rate for working overtime is usually in excess of that paid during normal working hours. Usually the standard (normal) working hours are 8 hours per day, 40 hours a week or 176 hours a month. Overtime hours are hours worked by the employee over and above the agreed normal hours. Overtime payment is the additional amount paid to employees who worked beyond normal hours during a particular period of time. Usually overtime payments are applicable to employees who are paid on time basis. In Tanzania, the standard overtime factors applicable are 1.5 for week days and 2.0 for weekend and holidays. Overtime amount is computed using the following formula:

$$\text{Overtime payment} = \frac{\text{Basic pay}}{\text{Hours per period (176 hours)}} \times \text{Factor} \times \text{Overtime hours worked}$$

$$= \text{Normal hours' rate} \times \text{Factor} \times \text{Overtime hours worked}$$

Note:

Standard factors are:
- 1.5 for weekdays
- 2.0 for weekends and holidays

Example 2.2

Mkwakwani Institute is a government agency recently organized in Zanzibar and its surroundings to rehabilitate street children. It has five employees whose salaries are paid according to the normal calendar of the month. The following data relates to the month of December, 2021:

S/N	Name of employee	Basic salary	Total overtime hours worked	Duration of overtime work
1.	Riziki Kibo	1,720,000	4	4:00 p.m. – 8:00 p.m.
2.	Zawadi Almasi	820,000	8	Sunday (8:30 a.m. – 5:30 p.m.)

Additional Information:

(a) The management of the institute usually expects a worker to work 40 hours in a week.

(b) There were no absentees during the month.

(c) All employees are employed on permanent basis.

Required: Compute the overtime amount for each employee.

Solution

Overtime calculations:

For: Riziki Kibo

Overtime payment =

$$\frac{\text{Basic pay}}{\text{Hours per period (176 hours)}} \times \text{Factor} \times \text{Overtime hours worked}$$

$$\text{Overtime payment} = \frac{1{,}720{,}000}{176} \times 1.5 \times 4 = \textbf{TZS 58,636.36}$$

For: Zawadi Almasi

$$\text{Overtime payment} = \frac{860{,}000}{176} \times 2 \times 8 = \textbf{TZS 78,181.82}$$

Example: 2.3

Mr. Mlay is an employee of Faraja enterprise Ltd. On the last week of the month ended 31st October, 2021 he worked in a total of 48 hours. His hourly rate is TZS 30,000 per hour. Assuming the overtime was worked on weekdays, you are required to calculate:

(a) Basic pay
(b) Overtime payment
(c) Gross pay

Solution

(a)
$$\text{Basic pay} = \text{Rate per hour} \times \text{Normal working hours worked}$$
$$= \text{TZS } 30{,}000 \text{ per hour} \times 40 \text{ hours}$$
$$= \textbf{TZS 1,200,000}$$

(b) Overtime payment

$$\text{Overtime payment} = \text{Normal hours' rate} \times \text{Factor} \times \text{Overtime hours worked}$$
$$= \text{TZS } 30{,}000 \text{ per hour x } 1.5 \text{ x } 8 \text{ hours}$$
$$= \textbf{TZS 360,000}$$

(c) Gross pay

Gross pay = Basic pay + Allowances

From the given data, Gross pay = Basic pay + Overtime payment

= 1,200,000 + 360,000 = **TZS 1,560,000**

Calculations of various deductions from employee's pay

Payroll accounting is significantly influenced by legislation enacted by governments. These laws affect payroll accounting because they levy taxes based on payroll amount and they extract statutory contribution by both employer and employees based on payroll figures. Thus, the calculation of payroll involves the determination of gross pay, followed by the subtraction of deductions and payroll taxes to arrive at net pay. Payroll deductions are classified as statutory deductions and voluntary deductions.

Statutory deductions

These are deductions governed by the law enacted by the parliament. Examples; Tax deductions i.e. Pay As You Earn (PAYE), National Social Security Fund (NSSF), Public Service Social Security Fund (PSSSF) and National Health Insurance Fund (NHIF).

PAYE

PAYE is an abbreviation that stands for "Pay As You Earn". It was enacted by the parliament in the income tax act of 1973 and inherited by the income tax act of 2004. However, every year the government is reviewing it to assess the amount to be charged as PAYE Tax. PAYE is a tax levied (charged) on monthly income of employees. Monthly income for the purpose of PAYE will be gross pay reduced by earning which are not taxable. The tax rates are progressive, meaning that the more income you earn the more the PAYE.

Contribution to pension fund schemes

These are statutory deductions from employees' salary to a pension fund. These contributions are shared between the employer and employees on well stated rates. In Tanzania for example, before 2018, the pension fund system comprised of mandatory defined pension funds. These funds were Parastatal Pension Fund (PPF), Public Service Pension Fund (PSPF), Local Authority Pension Fund (LAPF), Government Employees Provident Fund (GEPF), and the National Social Security Fund (NSSF). In 2018, the parliament passed an Act No.2 of 2018 which merged the four public funds (PPF, PSPF, LAPF and GEPF), into one scheme named the Public Service Social Security Fund (PSSSF). PSSSF collects contributions and make terminal benefit payments to public service employees, while NSSF caters for the private sector employees. While with NSSF employee contributes 10% of the basic pay and employer contributes 10% of the basic pay, for PSSSF 5% is to be deducted from the employee's salary and 15% is contributed by the employer. The employee's contribution is an expense to the employee, and that of the employer's is an expense to the employer. According to the Tanzania laws and regulations, this contribution is regarded as an allowable deduction. This means, it should be deducted from the gross salary before applying the relevant tax rate to obtain the PAYE amount.

National Health Insurance Fund (NHIF)

NHIF was created by an Act of Parliament No. 8 of 1999. Membership to the fund is compulsory for all public servants. The NHIF scheme provides benefits to the contributing members, their spouses and up to four legal dependents (children or parents/in-laws). Under NHIF, public servants contribute 3% of their basic salaries and the employer contributes 3% of the employee's basic salary as well. According to the Tanzania regulations, this contribution is regarded as non-allowable deduction. This means, tax rate is applied on the earnings before deduction of the NHIF amount.

Voluntary deductions

These are deductions contributed by employees voluntarily. For example, an employee may request his employer to deduct from his salary the amounts for insurance premiums, trade unions contributions, etc. These deductions vary from one firm or person to another.

Salary advances and staff loans

Sometimes an employee may need to receive their salaries or part of it in advance. This advance receipt of the salary is called salary advance. At the end of the month an employee's net pay must be reduced by salary received before the month end.

Loans are advances to staff, that need to be repaid in more than one month. Usually there will be an agreement based to the rate of interest, loan repayment instalments and amounts. Repayment instalment will be deducted from an employee's net pay at the end of each agreed month.

Example: 2.3

Mr. Kahawila has a basic working week of 40 hours, paid at the rate of TZS 40,000 per hour. For hours worked in excess to this, he is paid 1.5 times basic rate. In the week ended 9th May, 2021 he worked 47 hours. The first TZS 300,000 per week is free of income tax, but on the next TZS 250,000 he pays 20% for tax, and above that, he pays 25% for tax.

Calculate the tax payable for the week ended 9th May, 2021 assuming that all overtime work was done during week days.

Solution

(i) Computation of employee's gross pay:

Gross pay = Basic pay + allowances

Basic pay = Rate per hour × normal working hours worked
= TZS 40,000 per hour × 40 hours
= TZS 1,600,000

Overtime payment = Rate per hour × Overtime rate × Overtime hours worked
= TZS 40,000 × 1.5 × 7 hours
= TZS 420,000

Gross pay = 1,600,000 + 420,000

Gross pay = TZS 2,020,000

(ii) Computation of employee's PAYE:

Taxable income = 2,020,000 - 300,000 = 1,720,000

$$\text{PAYE} = (250{,}000 \times 20\%) + \left[(1{,}720{,}000 - 250{,}000) \times 25\%\right]$$

$$= 50{,}000 + 367{,}500$$

$$= 417{,}500$$

Tax payable for the week ended 9th May, 2021 = **TZS 417,500**

Exercise: 2.2

1. Mloni is an employee of KESHA Company Ltd. On the week ended 7th January, 2022 he worked a total of 52 hours. His hourly rate is TZS 35,000 per hour. Apart from hours worked Mloni was paid a bonus of TZS 20,000.
   Required: Calculate Mloni's gross pay.
2. Mr. Palanjo is an accountant with a salary of TZS 2,200,000 per month plus a bonus, which was TZS 400,000 for the month of May, 2020. He pays health contributions of 5% of gross pay, and these are allowed as reliefs against income

tax. In addition to this he has further reliefs (free pay) of TZS 430,000. The taxable pay is taxed at the rate of 20% on the first TZS 250,000 whilst the remainder suffers the 25% tax rate.

Required: Calculate the total deductions for May, 2020.

3. Jamal has a job as a car salesman. He is paid a basic salary of TZS 800,000 per month, with a commission extra of 3% on the value of his car sales. During the month of April, 2020, he sold TZS 3,000,000 worth of cars. The first TZS 450,000 per month is free of income tax, on the next 200,000 he pays at the 20% rate and above that, he pays at the rate of 25%.

   Required: Calculate the tax payable for the month of April, 2020.

Taxable income

Taxable income is the amount of income that is subject to tax, after making all deductions and exemptions. Taxable income is calculated by adding up all sources of income, excluding non-taxable items, and subtracting deductions. Allowable deductions are payroll deductions that are excluded from tax under income tax laws and regulations. Since they are deducted prior to tax calculations, they lower the employee's taxable income hence, increase his or her take-home pay. For Tanzanian public employees, contributions made to the social security funds are regarded as non-taxable deduction.

Net pay calculations

Net pay is obtained after deducting all required deductions from the gross salary. This is the take home pay. The computation of net pay requires the following steps:

(a) Compute basic pay,
(b) Compute gross pay,
(c) Compute required deductions,
(d) Compute net pay.

Example: 2.4

Mr. Jumanne Mpimbi is an employee receiving a basic salary of TZS 780,000, per month. He is also entitled to the following non-taxable allowances:

(a) Meal allowance of TZS 10,000 per day;
(b) Transport allowance TZS 6,000 per day;
(c) Medical allowance TZS 200,000 per month; and
(d) Rent assistance of 10% of the basic salary.

Average working days per month is 22 days.

During the month of March, 2022, he took salary advance of TZS 150,000. Mr. Jackson is to contribute 1% of gross salary for development levy, 10% of basic salary for NSSF and 2% of basic salary for life insurance policy.

PAYE tax is payable as:

Monthly income	**Tax rate**
Salary up to 450,000	NIL
Salary above 450,000 up to 850,000	10% of the amount in excess of TZS 450,000
Salary above 850,000	TZS 40,000 plus 15% of the amount in excess of TZS 850,000

Required: Determine Mr. Jumanne's net pay for March, 2021.

Solution

A statement showing Mr. Jumanne's net pay for March, 2022

Details	**TZS**	**TZS**
Name of the employee: Jumanne Mpimbi **Month:** **March, 2022**		
Basic salary		780,000
Add: Non-taxable allowances		
- Meal allowance = (TZS 10,000 × 22)	220,000	
- Transport allowance = (TZS 6,000 × 22 days)	132,000	
- Medical allowance	200,000	
- Rent allowance = (TZS780,000 ×10%)	78,000	630,000
Gross salary		**1,410,000**
Less: Deductions		
- PAYE tax*	25,200	
- Development levy = (1,410,000 ×1%)	14,100	
- NSSF = (780,000 ×10%)	78,000	
- Life insurance = (780,000 × 2%)	15,600	
- Salary advance	150,000	282,900
Net Pay		**1,127,100**

Workings:

**Computation of the PAYE amount*

The taxable income = TZS 780,000

Less: Allowable deduction – NSSF (10% of the basic salary) = 78,000

Taxable amount = TZS 702,000

Tax rate 10% on the amount in excess of TZS 450,000

= TZS 702,000 – TZS 450,000 = TZS 252,000

PAYE = 10% × **252,000 = TZS 25,200**

Example 2.5

Mrs. Sima Amboni is an employee working with Nondo Traders as an accountant. Her basic salary is TZS 1,800,000, per month. During October, 2021 she requested and given a salary advance of TZS 350,000 to enable her cover emergency family issues. Mrs. Amboni is also entitled to the following taxable allowances:

(a) Housing allowance TZS 100,000 per month;
(b) Meal allowance of TZS 8,000 per day; and
(c) Transport allowance TZS 10,000 per day;

Average working days per month is 22 days.

During October, 2021, Mrs. Amboni worked for extra four (4) days – the Saturdays, which are paid at an agreed extra duty allowance rate of TZS 30,000 per day. She also contributes 2.5% of the gross salary for development levy, 10% of basic salary for NSSF, and 8% of basic salary for Health insurance fund.

PAYE tax is payable as:

Monthly income	**Tax rate**
Salary up to 300,000	NIL
Salary above 300,000 up to 1,100,000	10% of the amount in excess of TZS 300,000
Salary above 1,100,000	TZS 80,000 plus 15% of the amount in excess of TZS 1,100,000

Required: Determine Mrs. Sima Amboni's net pay for March, 2021

Solution

A statement showing Mrs. Amboni's net pay for October, 2021

Name of the employee: Sima Amboni		
Month: **October, 2022**		
Details	**TZS**	**TZS**
Basic salary		1,800,000
Add: Taxable allowances		
- Housing allowance	100,000	
- Meal allowance = (TZS 8,000 × 26)	208,000	
- Transport allowance = (TZS 10,000 × 26 days)	260,000	
- Extra duty allowance = (TZS 30,000 × 4 days)	120,000	688,000
Gross salary		**2,488,000**
Less: Deductions		
- PAYE tax*	261,200	
- Development levy = (2.5% × 2,488,000)	62,200	
- NSSF = (10% × 1,800,000)	180,000	
- Health insurance Fund = (8% × 1,800,000)	144,000	
- Salary advance	350,000	997,400
Net Pay		**1,490,000**

* Gross income = TZS 2,488,000

Less: Allowable deduction – NSSF (10% of the basic salary) =180,000

Taxable amount = TZS 2,308,000

Tax rate applicable is TZS 80,000 ***plus*** 15% on the amount in excess of TZS 1,100,000

= TZS 80,000 + 15%× TZS (2,308,000 – 1,100,000) = TZS 1,208,000

= TZS 80,000 + TZS 181,200

PAYE = TZS 261,200

Exercise 2.3

Amani, Bajuta and Chikere are employed by Kahawa Supplies Enterprises. The normal working hours are 8 per day, 22 days in a month. Time work in excess to this is compensated at a rate of 1.5. The following data relate to the three workers during the month of June, 2021.

Name of Employee	Number of hours worked	Rate per hour (TZS)
Amani	176	4,000
Bajuta	196	3,500
Chikere	190	5,000

The following deductions are effected at the end of each month.

(a) PAYE tax:

- Salary up to TZS 450,000 is non-taxable.
- Salary above TZS 450,000 but not exceed TZS 900,000 is 5% of the amount in excess of TZS 450,000;
- Salary above TZS 900,000 up to TZS 1,350,000 is TZS 22,500 plus 10% of the amount in excess of TZS 900,000; and
- Salary above TZS 1,350,000 is TZS 45,000 plus 20% of the amount in excess of TZS 1,350,000.

(b) 5% is deducted on employees' basic salary and 15% by the employer to contribute for NSSF.

(c) 2% of the gross salary is deducted to contribute for workers association.

(d) A non-taxable housing allowance is given at 10% of basic salary. Only Chikere has housing accommodation.

(e) Every employee is entitled to the following non-taxable allowances:

- Transport allowance TZS 10,000 per day;
- Meal allowance TZS 15,000 per day; and
- Chikere is to receive further TZS 150,000 for skill allowance at the end of every month.

Required: Prepare a statement of net pay for each employee for the month of June, 2021.

Preparation of payroll accounts

Employers maintain records with information of each employee salary including hours worked, the rate of pay, total overtime, entitlement and additions to salary, reductions from salary and employee's net salary pay. Payroll records refer to documents kept by entities for recording payroll transactions or information. Basically, the two major payroll records are individual earning statement (salary slip) and payroll summaries.

Individual earning statement (salary slip)

This is a document given to an employee informing about the summary of items which resulted to the amount to be paid. At the end of each pay period, this statement is sent to every employee to communicate his/her earnings information for that period.

A salary slip looks as shown below:

Name of employee: ....
Payroll No: ....
Month: ....

Details	TZS	TZS
Basic pay		xx
Add: Overtime payment	xx	
Transport allowance	xx	
Rent allowance	xx	
Meal allowance	xx	xx
Gross pay		xxx
Less: Deductions		
PAYE	xx	
NSSF / PSSSF NHIF	xx xx	
Salary advance/loan	xx	
Trade union	xx	xx
Net pay		**xxx**

Note: The cheque is written on the basis of the net pay amount.

Payroll summary

Payroll summary refers to a report which provides periodical analysis of payment that was made to the employees.

Some organisation have several departments or operating units. Usually, payroll is prepared along departmental lines. From the information on the salary slips, it should be possible to prepare a payroll summary for the department. Salaries can be paid in cash, by cheque or by credit transfer to various employee's bank accounts. It is more efficient if salaries are paid by cheque or credit transfer. Payroll summary looks as shown in the specimen below:

PQR Company

Production department: Payroll summary for the month ended ………….

Employee's name	Basic pay	Overtime pay	Other allowances	Gross pay	Salary advance	PAYE	NSSF	NHIF	Net pay
A	xx	xx	xx	xx	xx	xx	Xx	xx	xx
B	xx	xx	xx	xx	xx	xx	Xx	xx	xx
C	xx	xx	xx	xx	xx	xx	xx	xx	xx
TOTAL	**xxx**	**xxx**	**xxx**	**xxx**	**xxx**	**xxx**	**xxx**	**xxx**	**xxx**

Example: 2.7

Msilanga Company pays employees per week as detailed below (Amounts in TZS):

Name	Weekly Pays	Deduction per week (Medical Insurance)
Ally	7,500,000	300,000
Sakina	8,000,000	300,000
Blandina	7,800,000	400,000
Peres	6,200,000	300,000

Additional Information:

(a) Each employee pays 5% for income tax per month.

(b) All employees contribute 10% monthly for NSSF.

Required: Prepare the payroll summary for the month ended 31st December, 2021.

Solution

Msilanga Company

Payroll Journal Summary for the month of December, 2021 (TZS)

S/N	Name of Employee	Basic pay	Gross pay	Income tax	Medical insurance	NSSF	Net pay
		'000'	**'000'**	**'000'**	**'000'**	**'000'**	**'000'**
1.	Ally	30,000	30,000	1,500	1,200	3,000	24,300
2.	Sakina	32,000	32,000	1,600	1,200	3,200	26,000
3.	Blandina	31,200	31,200	1,560	1,600	3,120	24,920
4.	Peres	24,800	24,800	1,240	1,200	2,480	19,880
	TOTAL	**118,000**	**118,000**	**5,900**	**5,200**	**11,800**	**95,100**

Journal entries

The journal entries dealt with in payroll accounting are those made in the books of the employer. Primarily, such entries include debits for the salaries expense, and the company's portion of payroll taxes. There is also credit entries to liability for payroll taxes that have not been paid, as well as for the amount of cash already paid to employees for their net pay and salary advances. The statutory contributions like deductions for pension contributions and health insurance are also credited, debiting the salary expenses account. The basic entries are as follows:

Journal entries

S/N	Transaction	Accounting entries
1.	When employee's salary is recognized:	Dr. Salary expenses account with the gross salary xx Cr. Income tax payable account xx Cr. NSSF/PSSSF payable account xx *(Employee and employer's contributions)* Cr. NHIF payable account xx *(Employee and employer's contributions)* Cr. Salary advance/loan account xx Cr. Net pay account xx
2.	When salary is paid to employee's account:	Dr. Net pay account xx Cr. Bank account xx
3.	When cash is remitted:	Dr. Income tax payable account xx Dr. NSSF/PSSSF payable account xx *(employee and employer's contributions)* Dr. NHIF payable account xx *(employee and employer's contributions)* Cr. Bank account xx
4.	When salary expense is transferred to income statement:	Dr. Income statement xx Cr. Salary expense account xx

Example 2.8

Using details given in example 2.7, prepare the necessary journal entries, in the books of Msilanga Company.

Solution

Journal entries

S/N	PARTICULARS	Dr.	Cr.
1.	Salary expenses account	129,800,000	
	Income tax payable account		5,900,000
	Medical Insurance payable account		5,200,000
	NSSF payable account – employee's contribution		23,600,000
	Net pay account		95,100,000
	(Being recognition of employees' salaries)		

2.	Income tax payable account Medical Insurance payable account NSSF payable account – employer and employee's contribution Net pay account Bank account *(Being salary expenses paid)*	5,900,000 5,200,000 23,600,000 95,100,000	129,800,000
3.	Income statement Salary expenses account	129,800,000	129,800,000

Exercise: 2.4

1. Payroll summary of Gerald, a sole proprietor shows gross pay of TZS 1,440,000, PAYE TZS 204,000, NHIF TZS 43,200 and NSSF TZS 72,000.

   Required: Prepare journal entries to record these transactions.

2. Biheri Chuma is an employee of BESERA Group Ltd. She is being paid at a normal rate of TZS 25,000 per hour, on 176 hours a month (22 days per month). During July, 2019, total hours worked were 188. BESERA Group Ltd. pays overtime at a rate of 1.5 of normal rate. Biheri Chuma is also entitled to meals allowance: TZS 14,000 per day, transport allowance TZS 12,000 per day and medical allowance TZS 60,000 per month. Biheri took a car loan for TZS 5,000,000 which is repaid on monthly basis at the rate of 3% of the basic pay. The following monthly deductions should also be made:

   (a) PAYE tax:
   - Salary for an amount up to TZS 450,000 is non-taxable.
   - Salary above TZS 450,000 but not exceeding TZS 900,000 is 5% of the excess amount;
   - Salary above TZS 900,000 but not exceeding TZS 1,800,000 is TZS 22,500 plus 10% of the excess amount;
   - Salary above TZS 1,800,000 but not exceeding TZS 2,700,000 is TZS 112,500 plus 30% of the excess amount.

   (b) NSSF contribution is 5% by employee and 15% by employer of basic salary.

   You are required to prepare:

   (i) Journal entries to record payroll cost for the month for BESERA Group Ltd.
   (ii) Biheri Chuma's salary slip.

3. At the end of the month, an organization's management needs to know one week's wages of one of their employee – Batuli who had to leave the organisation for employment in another company. The employee's payroll related records indicate the following:
   (i) The gross wages - TZS 500,000;
   (ii) Income tax – TZS 100,000,
   (iii) Employer's contribution to national pension scheme - TZS 60,000,
   (iv) Employees' contribution to pension scheme – TZS 40,000, and
   (v) Employees' contributions to national health insurance company TZS 38,000.

You are required to prepare:

(a) Batuli's salary slip; and
(b) Ledger accounts in the books of the employer

Chapter summary

1. Payroll is the term used to describe the calculation of amount payable to employees. It is the duty of accounting department in any organisation to calculate accurate amount payable to right employees at the right time; and payroll accounting process is used to calculate the amount payable to employees.
2. Employee in an organisation may be remunerated in a number of forms, however, the final pay to staff may involve a combination of two or more modes. The most common modes of remuneration include; time based remuneration schemes; and piece based remuneration schemes. Employers may use either, fixed amount per period of time, piece rate, commission; or basic hourly rate to calculate salaries of employees.
3. Payroll deductions are classified as statutory deduction and voluntary deductions. Statutory deductions are deductions governed by the law enacted by the parliament. Examples include; Tax deductions (PAYE), National Social Security Fund (NSSF), Public Service Social Security Fund (PSSSF) and National Health Insurance Fund (NHIF). Voluntary deductions are those deductions which are contributed by employees voluntarily. For example, insurance contributions and workers association contributions. These deductions vary from one firm or person to another.
4. Net pay is obtained after deducting all required deductions from the gross salary. This is the take home pay. The computation of net pay requires computation of the basic pay, gross pay, and required deductions.

5. Employers maintain records with information of each employee's salary including; hours worked, rate of pay, total overtime, entitlement and additions to salary, deductions from salary and employee's net salary pay.

6. Payroll records refer to documents kept by entities for recording payroll transactions or information. Basically, the two major payroll records are individual earning statement (salary slip) and payroll summary.

7. Salaries can be paid in cash, by cheque or by credit transfer to various employee's bank accounts. It is more efficiency if salaries are paid by cheque or credit transfer.

Revision exercise

1. State and explain the objectives of payroll accounting
2. Explain two statutory contributions related to employee's salary in Tanzania.
3. What records would you expect to find in most payroll systems?
4. Following is a summary of data obtained from JERSEY Company's payroll records. In the summary, you will note that some amounts that have been omitted and represented by letters.

S/N	Earnings	TZS
	Basic Pay	(a)
	Overtime	504,000
	Gross Pay	(b)
	Deductions	
	PAYE	(c)
	NSSF (10% on gross pay)	580,650
	Worker association contribution	77,000
	Total deduction	2,087,750
	Net pay	(d)

Required:

Determine the amounts omitted in the above table from letter (a) to (d).

5. GOLE Ltd. has the following four employees in its payroll: Almasi, Bahati, Charles and Doricas. The normal working day is 8 hours per day for 22 days in each month. Time worked in excess of this is compensated at the rate of time and a half. The hourly rate for Almasi and Bahati is TZS 40,000, for Charles is TZS 35,000 and for Doricas is TZS 50,000.

During the month ended 30th September, 2021 the following hours were worked:

Name **of employee**	**Hours worked**
Almasi	168
Bahati	190
Charles	176
Doricas	184

The following deductions are effected at the end of every month:

(a) PAYE: Salary up to TZS 5,000,000 the tax payable is TZS 286,750. Any excess up to less than TZS 7,500,000 add 15% thereof.

(b) NSSF: 10% of gross salary to be contributed by employee and 10% of gross salary to be contributed by employer.

(c) UWASISE: 10% of gross salary.

(d) Housing: 10% of basic salary. Only Doricas has housing accommodation.

(e) Every employee is entitled to the following allowances:

- Transport allowance: TZS 20,000 per day;
- Meal allowance: TZS 18,000 per day; and
- Doricas is to receive a further TZS 80,000 skills allowance at the end of each month.

All payments to employees are recorded in the payroll records of the company.

Required:

(i) Draft the above details in salary slips for each employee for the month of September, 2021.

(ii) Prepare payroll summary totals and pass a composite journal entry to record the above transactions.

Chapter Three

Container accounts

Introduction

Most manufacturers or producers of goods pack their products using different forms of material enclosures. The packages used in dispatching goods to customers are referred to as containers. Some of these containers are returnable after use, and others are non-returnable. These containers need to be accounted for in the books of accounts in order to identify their value, quantity and profit earned in dealing with them. In this chapter you will learn about the meaning and classes of containers, the rates used in containers, important calculations, and methods for preparation of container accounts. You will also learn about the preparation of the statement of profit or loss on containers, as well as the treatment of containers in the statement of financial position. The competencies developed in this chapter will enable you to determine the cost of packaging and to record the container related costs and transactions in the books of accounts.

Meaning and classes of container

A container is anything in which goods are contained. Goods are very often packed into bottles, boxes, bags, cans, drums, shipping containers etc. Some containers are returnable by the purchaser after use, while others are just disposed-off by the customer after using-up the product.

Containers may either be manufactured by the entity itself or bought from outside suppliers. In either case, they involve cost which must be recovered from the sale price of the articles packed. Therefore, there is the need for accounting of containers.

The importance of preparing Container accounts includes

(a) Providing a basis for monitoring the movement of containers both in the warehouse and in the hands of customers;

(b) Providing a basis for measuring profit or loss on containers supplied;

(c) Providing records for available, lost, damaged or scrapped containers;

(d) Showing amount of debtors for containers

Types of containers

For accounting purposes, containers are classified into two types: returnable and non-returnable containers.

Returnable containers

Returnable containers are containers strongly constructed or specially designed to be returned by the customer after consuming the content therein so that they can be re-used. Examples of returnable containers include crates of soda, water dispenser bottle, shipping containers and gas cylinders.

Figure 3 1: **Examples of returnable containers**

These special containers are often expensive and a producer will always encourage customers to return them by imposing an additional charge when the container is taken away and allowing a refund when such container is returned within an agreed time and in good condition. When returnable containers are not returned within the agreed period, such containers are usually written off by the supplier of the commodity, and the amount intended for refund will not be refunded.

Non-returnable containers

Non-returnable containers are containers that customers are not expected to return them to producer after the consumption of the product. Examples of these include packet for sugar, plastic water bottle, plastic bags and boxes.

Figure 3 2: **Examples of non-returnable containers**

The cost of these containers is passed on to the customers as part of the total price of the product packed in. The cost of the container forms part of the selling price.

Preparation of container accounts

The accounting procedure for containers largely depends upon the way in which they are handled.

Non-returnable containers

Accounting for non-returnable containers can be exercised under two conditions, when a separate charge is made, and when a separate charge is not made. These conditions are explained in detail as follows:

When no separate charge is made

When the cost of container is not charged separately when fixing the selling price, such a price is so adjusted that it covers the cost of containers.

When a separate charge is made

The costs of containers and of the products are sometimes regarded separate in non-returnable containers. Usually the separate charge made to customers for the containers is higher than the cost of the containers. The difference between cost and charge -out rate of the containers is regarded as a profit or loss made on the containers for the period. Such profit or loss will then be transferred to profit or loss account.

Returnable containers

Accounting for returnable containers can also be exercised under two situations, when a separate charge is made, and when a separate charge is not made. These conditions are explained in detail as follows:

When no separate charge is made

In this case no separate charge is made for the containers. The cost of containers is therefore included in selling price of the goods and accounted for along with the goods sold. However, they are expected to return the containers within a given period. Since containers are returnable, it is necessary to have a separate account for the containers held by the customers.

When a separate charge is made

Returnable containers will often be subject to a deposit being charged to customers and a refund being allowed when the containers are returned in good condition and within the agreed period. Usually, this refund is lower than the initial deposit. However, no refunds are made when containers are not returned by customers within the agreed time. Therefore, the entity generates two types of incomes; a profit and a hire charge.

This class of containers (i.e returnable container) will be the focus of this topic.

Terminologies used in containers accounting

Purchase rate (PR): Purchase rate is the price paid to acquire the containers. Purchase rate is abbreviated as PR.

Charge-out rate (CR): This is a deposit charged to customers when the containers are sent to them. The charge out rate should be enough to discourage customers from holding the containers. However, it should not be too much to discourage customers from buying the goods contained therein.

Returnable rate or refundable rate (RR): This is the amount to be refunded to the customer, if the containers are returned within the agreed time, and in good condition. Returnable rate or refund rate is abbreviated as RR.

Valuation rate (VR): Valuation rate is the rate at which containers in the premises and in hands of customers are valued during stock taking or stock valuation.

Hiring charge (HC): Hiring charge is the difference between charge-out rate and refundable rate.
Hiring charge = (CR-RR).

Hiring profit: Hiring profit is the total hiring charge for all containers sent to a customer or customers. Hiring profit = Hiring charge × Number of containers sent to customers.

Retained profit: Retained profit is the difference between returnable rate and valuation rate. Containers held by a customer beyond the agreed period are regarded as sold to that particular customer, therefore the difference between RR and VR, for all containers retained by customers, is known as retained profit.

Depreciation amount: Depreciation amount is amount of decrease in value of containers. Depreciation amount is obtained as the difference between the purchase rate and valuation rate of such containers. Depreciation amount = (PR-VR).

Important calculations in container accounts

Calculations in container accounts mainly focus on the computation of profit or loss on containers. Computation of profit or loss on a container is made up of the following common elements: hiring profit, profit on retained containers, loss on disposal of containers and depreciation of containers in stock at the end of the trading period.

The following is a specimen statement on computation of profit or loss on container.

Statement of computing profit or loss on containers

Details	**(TZS)**	**(TZS)**
Hiring profit		xx
Add:		
Retained profit	xx	
Profit on disposal of containers	xx	xx
		xxxx
Less:		
Loss on disposal of containers	xx	
Depreciation	xx	xx
Profit or loss on containers		**xxx**

Summarized rates:

Hiring charge = Charge-out rate – Returnable rate

Hiring profit = Hiring charge × number of containers sent to customers

Retained profit = (Returnable rate - (Valuation rate) × number of containers retained by customers

Depreciation rate = (Purchase rate - Valuation rate)

Example 3.1

Furaha Company Ltd. is a business firm which sells its products in returnable containers. The following information relates to container transactions for the year ending 31st December, 2019.

S/N	Details	(TZS)
1.	Invoice (Charge out) Rate	4,000
2.	Refundable Rate, (RR)	1,500
3.	Valuation Rate, (VR)	1,200
4.	Purchase Rate, (PR)	2,000

You are required to compute the following:

(i) Hiring charge;
(ii) Retained profit; and
(iii) Depreciation.

Solution

(i) Hiring charge = Charge-out Rate - Returnable Rate
TZS 4,000 – TZS 1,500 = **TZS 2,500**

(ii) Retained profit = Returnable Rate - Valuation Rate
TZS 1,500 - TZS 1,200 = **TZS 300**

(iii) Depreciation = Purchase Rate – Valuation Rate
TZS 2,000 - TZS 1,200 = **TZS 800**

Exercise 3.1

1. The following information relates to a business that sells its products in returnable containers for the year ended 31st December, 2020:
   (a) Charge-out rate - TZS 3,200;
   (b) Retained profit - TZS 2,500;

(c) Purchase rate - TZS 1,400; and

(d) Returnable rate – TZS 2,000.

You are required to compute for the following:

(i) Valuation rate;

(ii) Hiring charge; and

(iii) Depreciation rate per container.

2. The following information relates to ABC Company Limited which sells its products in returnable containers:

S/N	Details	(TZS)
1	Charge-out rate	1,200
2	Refundable rate	650
3	Valuation rate	350
4	Purchase Rate	500

You are required to compute:

(i) Hiring charge;

(ii) Depreciation rate; and

Preparations of containers accounts

There are mainly three methods of accounting for returnable containers in the books of the seller. These are:

(a) Container suspense method;

(b) Container depreciation method; and

(c) Container trading account method.

Container suspense method

Under this method two accounts are prepared namely, container stock account and container suspense account.

Container stock account

This is an account used to records all the transaction relating to containers owned by the business. It contains the columns for quantity and value. This account is debited with the value of stock brought forward, purchases of additional containers and repairs and maintenance. It is credited with damaged, scrapped and retained stock. Hire charges and closing stock are also credited in this account. The difference in this account represents either profit or loss on containers. Therefore, using the container suspense method, container stock account is prepared to control the stock movement of containers and to ascertain the profit or loss on containers.

Format of the container stock account

Dr. **Containers stock account** **Cr.**

Date	Details	Qty.	Rate	TZS	Date	Details	Qty.	Rate	TZS
	Balance b/d					Container suspense: *(retained containers)*	xx	RR	xx
	- Premises	xx	VR	xx					
	- Customers	xx	VR	xx		Container suspense: (*hiring charges*)	-	-	xx
	Bank: (*Purchases)*	xx	PR	xx					
	Bank: (*Repairs)*	-	-	xx		Bank: *(Sale of scrap)*	xx	SP	xx
	Profit on sale of containers: *(Income statement)*	-	-	xx		Destroyed/ damaged	xx	-	-
						Balance c/d			
						- Premises	xx	VR	xx
						- Customers	xx	VR	xx
		xxx	**xxx**	**xxx**			**xxx**	**xxx**	**xxx**

Container Suspense Account

This is an account used to take track (monitor) of the movement of containers in the hands of customers. It is credited with the opening stock of containers in hands of customers and value of containers issued to customers. The debit entries are made for containers returned and containers retained by customers. The hiring charge is also indicated in the debit side of this account, representing the difference between charge-out rate and returnable rate on total number of containers charged out.

Format of the container suspense account

Dr. **Containers suspense account** **Cr.**

Date	Details	Qty.	Rate	TZS	Date	Details	Qty.	Rate	TZS
	Bank/Debtor: *(returned containers)*	xx	RR	xx		Balance b/d - Customers	xx	RR	xx
	Container stock: *(retained containers)*	xx	RR	xx		Bank/Debtor: *(Containers sent out)*	xx	CR	xx
	Container stock: *(Hiring charges)*	-	-	xx					
	Balance c/d - Customers	xx	RR	xx					
		xxx	**xxx**	**xxx**			**xxx**	**xxx**	**xxx**

Journal entries for returnable containers

S/N	Details	Dr.	Cr.
1.	Container stock account Bank/cash account (Being purchases of containers)	xx	xx
2.	Debtor/cash account (at CR) Container suspense account (at CR) (Being containers dispatched to customers)	xx	xx

3.	Containers suspense account (at RR) Debtor/cash account (at RR) (Being containers returned back by customers)	xx	xx
4.	Container suspense account (at RR) Container stock account (at RR) (Being containers retained by customers)	xx	xx
5.	Bank/cash account Container stock account (Being sale of containers (cash from containers scrapped)	xx	xx
6.	Container suspense account (at hire rate) Container stock account (at hire rate) (Being income on hiring of containers)	xx	xx
7.	Container stock account Bank/cash account (Being cost of repairs to containers)	xx	xx

The balance of container stock accounts represents profit or loss that is transferred to the statement of profit or loss and other comprehensive income.

Example 3.2

Wakuja Ltd. dispatch their goods to customers in returnable drums which remains the property of Wakuja Ltd. Deposits are made when dispatching drums, and when the drums are returned in good condition, there is a partial refund. The following information applies:

The drums cost TZS 18,000 each and they are charged out to customers at TZS 22,500 each. Upon return of the drums, the customers are credited with TZS 15,000 each. For stock taking purposes all the drums are valued at TZS 11,250 each.

Records reveal that on 1st January, 2018 there were 210 drums in stock of the company's warehouse and 75 drums in customer's possession. During the year ended 31st December, 2018 the following transaction occurred:

(a) 705 drums were dispatched to customers, 594 returned by customers;
(b) 24 drums were damaged and scrapped. These were sold for TZS 300,000;
(c) 285 new drums were purchased;
(d) The company paid TZS 90,00 during the year for repairs of drums; and

(e) 30 drums were kept by customers permanently. On 31st December, 2018 there were 156 drums in customer's possession. A physical stock check of those held by Wakuja Ltd. showed no discrepancy.

Required:

Use the information provided to prepare drums stock account and drums suspense account of Wakuja Ltd. for the year ended 31st December, 2018.

Solution: (i)

Dr. **Drums stock account** **Cr.**

Date	Details	Qty.	Rate	TZS	Date	Details	Qty.	Rate	TZS
2018 1st Jan.	Balance b/d				2018 31st Dec.	Container suspense: *(Retained containers)*	30	15,000	450,000
	- Premises	210	11,250	2,362,500					
	- Customers	75	11,250	843,750					
	Bank: *(purchases)*	285	18,000	5,130,000		Container suspense: *(Hiring charges)*	-	-	5,287,500
31st Dec.	Bank: *(repairs)*	-	-	90,000		Bank: *(Sale of scrap)*	24	-	300,000
	Profit on sale of containers *(to income statement)*	-	-	3,416,250		Balance c/d			
						- Premises	360	11,250	4,050,000
						- Customers	156	11,250	1,755,000
		570	-	**11,842,500**			**570**	-	**11,842,500**
2019 1st Jan.	Balance b/d								
	- Premises	360	11,250	4,050,000					
	- Customers	156	11,250	1,755,000					

(ii)

Dr. **Drums suspense account** **Cr.**

Date	Details	Qty.	Rate	TZS	Date	Details	Qty.	Rate	TZS
2018					2018				
31st Dec.	Debtors *(Returned containers)*	594	15,000	8,910,000	1st Jan.	Balance b/d	75	15,000	1,125,000
	Containers stock: *(retained containers)*	30	15,000	450,000	31st Dec.	Debtors *(Containers sent out)*	705	22,500	15,862,500
	Container stock: *(Hiring charges)*	-	-	5,287,500					
31st Dec.	Balance c/d	156	15,000	2,340,000					
		780	-	**16,987,500**			**780**		**16,987,500**
					2019 1st Jan.	Balance b/d	156	15,000	2,340,000

Workings:

Closing stock of drums in the premises:

Closing stock of 360 units represents the balancing figure in the drum stock account.

This can also be found by using the following statement.

Statement of finding closing stock (units) in the warehouse

Details	**TZS**	**TZS**
Opening stock at the warehouse		xx
Add: Purchased containers	xx	
Returned containers from customers	xx	xx
		xx
Less: Containers sent to customers	xx	
Damaged containers written off	xx	
Containers returned back to suppliers	xx	xx
Closing stock of containers at the warehouse		xx

Statement of finding closing stock (units) in the warehouse

Details	**TZS**	**TZS**
Opening stock at the warehouse		210
Add: Purchased containers	285	
Returned containers from customers	594	879
		1,089
Less: Containers sent to customers	705	
Damaged containers written off	24	
Containers returned back to suppliers	0	729
Closing stock of containers at the warehouse		**360**

Finding hiring charges:

Hiring charges= (Charge out rate – Refund rate) × Drums dispatched to customers

Hiring charges = (22,500 – 15,000) × 705 = **TZS 5,287,500**

Finding missing figures of closing stock in the hands of customers:

The closing stock of 156 units is given.

However, if the closing stock is not given, it can also be deduced using the following computations:

A statement of finding closing stock (units) in hands of customers

Details	**TZS**	**TZS**
Opening stock of containers at customers' premises		xx
		xx
Add: Containers sent to customers		xx
	xx	
Less: Returned containers	xx	xx
Retained containers		xx
Closing stock of containers with the customers		

Calculated as:

A statement of finding closing stock (units) in hands of customers

Details	**TZS**	**TZS**
Opening stock at customers' premises		75
Add: Containers sent to customers		705
		780
Less: Returned containers	594	
Retained containers	30	624
Closing stock of containers with the customers		156

Example 3.3

The Liganga Company Ltd. supplies gas in containers which are returnable after use. The containers cost TZS 40,000 each and are charged out to customers on sale or return within six months at TZS 52,000 each. Provided they are returned within six months period they are credited at TZS 46,000 each. At the end of the year, Liganga Company Ltd. values all returnable containers in customers' hands and in the company premises at TZS 32,000 each. The following details are also provided:

Container stocks	**At the beginning of year 2019**	**At the end of year 2019**
Containers in the company premises	1,380	1,572
Returnable containers held by customers	2,395	1,455

During the year 2019, 1,550 new containers were purchased, 10,310 were invoiced to customers and 8,980 were returned. On inspection 260 containers requires repair costing TZS 325,000 and 28 containers were heavily destroyed, that, they had to be sold as scrap for TZS 60,000.

Required: Use container suspense method to prepare:

a) Containers stock account; and

b) Containers suspense account.

Solution

Dr. **Containers stock account** **Cr.**

Date	Details	Qty.	Rate ‘000’	TZS ‘000’	Date	Details	Qty.	Rate ‘000’	TZS ‘000’
2018					2018				
1st Jan.,	Balance b/d				31st Dec.,	Bank *(sale of scrap)*	28	-	60
	- Premises	1,380	32	44,160		Container suspense	2,270	46	104,420
	- Customers	2,395	32	76,640		*(Retained containers)*			
	Bank *(purchases)*	1,550	40	62,000		Container suspense	-	-	61,860
	Bank	-	-	325		*(hiring charge)*			
	(Repair on containers)					Balance c/d			
	Net profit	-	-	80,079		- Premises	1,572	32	50,304
						- Customers	1,455	32	46,560
		5,325		**263,204**			**5,325**		**263,204**
2019									
1st Jan.,	Balance b/d								
	- Premises	1,572	32	50,304					
	- Customers	1,455	32	46,560					

Dr. **Containers suspense account** **Cr.**

Date	Details	Qty.	Rate '000'	TZS '000'	Date	Details	Qty.	Rate '000'	TZS '000'
2019 31st Dec.,	Debtors *(Returned containers)*	8,980	46	413,080	2019 1st Jan.,	Balance b/d *(Container with customers)*	2,395	46	110,170
	Container stock: *(Retained containers)*	2,270	46	104,420		Debtors *(Containers sent out)*	10,310	52	536,120
	Container stock: *(hiring charge)*	-	-	61,860					
	Balance c/d	1,455	46	66,930					
		12,705		**646,290**			**12,705**		**646,290**
					2020 1st Jan.,	Balance b/d	1,455	46	66,930

Container trading method

Unlike in the container suspense method where profit or loss on containers is recognised in the containers stock account, under container trading method a trading account is prepared for this purpose. Two accounts are prepared, namely:

Container stock account: The accounting entries in this account are almost similar to the treatments made using container suspense method, except that, the hiring charge and profit or loss on containers will not be shown in this account.

Container trading account: This account replaces the container suspense account prepared using container suspense method. The account entries in this account include balance of containers in hands of customers at the beginning and end of the accounting period, containers sent to customers, containers returned and retained by customers. The difference between debit and credit totals represents either profit or loss on dealing with containers. Another important point to note here is that, retained containers are valued at valuation rate, instead of returnable rate treated under suspense method.

Example 3.4

Using the details provided in example 3.3, prepare the following accounts using container trading method:

a) Container stock account; and
b) Container trading account

Solution

Dr. **Containers stock account** **Cr.**

Date	Details	Qty.	Rate '000'	TZS '000'	Date	Details	Qty.	Rate '000'	TZS '000'
2018 1st Jan.,	Balance b/d				2018 31st Dec.,	Bank *(sale of scrap)*	28	-	60
	- Premises	1,380	32	44,160					
	- Customers	2,395	32	76,640		Trading account *(Retained containers)*	2,270	32	72,640
	Bank: *(purchases)*	1,550	40	62,000					
						Trading account *(loss on scrap)*	-	-	13,236
						Balance c/d			
						- Premises	1,572	32	50,304
						- Customers	1,455	32	46,560
		5,325		**182,800**			**5,325**		**182,800**
2019 1st Jan.,	Balance b/d								
	- Premises	1,572	32	50,304					
	- Customers	1,455	32	46,560					

Dr. **Containers trading account** **Cr.**

Date	Details	Qty.	Rate '000'	TZS '000'	Date	Details	Qty.	Rate '000'	TZS '000'
2019 31st Dec.,	Debtors *(Returned containers)*	8,980	46	413,080	2019 1st Jan.,	Balance b/d *(Container with customers)*	2,395	46	110,170
	Container stock *(loss on scrap)*	-	-	13,236		Debtors *(Containers sent out)*	10,310	52	536,120
	Container stock *(Retained containers)*	2,270	32	72,640					
	Bank *(Repair on containers)*	-	-	325					
	Profit on containers	-	-	80,079					
	Balance c/d	1,455	46	66,930					
		12,705		**646,290**			**12,705**		**646,290**
					2020 1st Jan.,	Balance b/d	1,455	46	66,930

Alternatively, a profit can be obtained using the following statement:

Details	**TZS**	**TZS**
Profit on containers sent to customers (52 – 46) × 10,310 containers		61,860,000
Add: Profit on containers kept by customers: (TZS 46,000 - 32,000) × 2,270 containers		31,780,000
		93,640,000
Less: Repairs on containers	325,000	
Depreciation on containers: (TZS 8,000 × 1,550 containers)	12,400,000	
Loss on scrapped containers: (TZS 32,000 × 28 containers) – TZS 60,000	836,000	13,561,000
Profit on issued containers		**80,079,000**

W1 profit on cases kept by customers:

Returnable rate	46,000
Value of containers net of depreciation	32,000
Profit per container on retained containers	14,000

For 2,270 × 14,000 = **TZS 31,780,000**

W2 Loss on scrapped containers:

Book value of scrapped containers (32,000 × 28)	896,000
Less: Proceeds on disposal of containers	60,000
Loss on disposal of containers	836,000

W3 Depreciation of container purchased:

Purchase rate	40,000
Book value	32,000
Depreciation per container	8,000

Depreciation on newly purchased containers = (TZS 8,000 × 1,550 containers) = **TZS 12,400,000**

Container depreciation method

Under this method a container stock account is prepared recording all transactions at valuation rate, except for bought containers which are recorded at purchase rate. The main purpose of this account under depreciation method is to determine the amount of depreciation on containers. The hiring charge, losses on scraped containers, and profit or loss on dealing with containers will not feature in this account, instead, a profit and loss account is prepared for the purpose.

The accounts to be prepared under this method are:

- Container stock account;
- Container suspense account; and
- Profit or loss

The container suspense account is opened in similar way as it was prepared under the container suspense method, except that the hiring charges will not be determined, instead it will be calculated and credited in the profit or loss account, together with the profit on retained containers.

The profit or loss account is opened for the purpose of determining the profit on dealing with containers. The account will be credited by the hire charge and profit on retained containers. The depreciation amount identified in the container stock account will be debited in the profit or loss account, together with repair expenses, loss on damaged containers and loss on sale of scraped containers.

Example 3.5

Using the details provided in example 3.3, prepare the following accounts using container depreciation method:

a) Container stock account;
b) Container suspense account; and
c) Container profit or loss account.

Solution

Dr. **Containers stock account** **Cr.**

Date	Details	Qty.	Rate '000'	TZS '000'	Date	Details	Qty.	Rate '000'	TZS '000'
2018					2018				
1st Jan.,	Balance b/d				31st Dec.,	Bank	28	-	60
	- Premises	1,380	32	44,160		*(sale of scrap)*			
	- Customers	2,395	32	76,640		Suspense account	2,270	32	72,640
	Bank: *(purchases)*	1,550	40	62,000		*(Retained containers)*			
						Depreciation	-	-	13,236
						(Profit or loss a/c)			
						Balance c/d			
						- Premises	1,572	32	50,304
						- Customers	1,455	32	46,560
		5,325		**182,800**			**5,325**		**182,800**
2019									
1st Jan.,	Balance b/d								
	- Premises	1,572	32	50,304					
	- Customers	1,455	32	46,560					

Dr. **Containers suspense account** **Cr.**

Date	Details	Qty.	Rate '000'	TZS '000'	Date	Details	Qty.	Rate '000'	TZS '000'
2019 31st Dec.,	Debtors *(Returned containers)*	8,980	46	413,080	2019 1st Jan.,	Balance b/d *(Container with customers)*	2,395	46	110,170
	Container stock: *(Retained containers)*	2,270	46	104,420		Debtors *(Containers sent out)*	10,310	46	474,260
	Balance c/d	1,455	46	66,930					
		12,705		**584,430**			**12,705**		**584,430**
					2020 1st Jan.,	Balance b/d	1,455	46	66,930

Dr. **Profit or loss account** **Cr.**

Details	TZS	Details	TZS
Depreciation	13,236	Hiring profit *(52 – 46) × 10,310*	61,860
Repairs on containers	325	Retained profit (46 – 32) × *2,270*	31,780
Net profit on containers	80,079		
	93,640		**93,640**

NOTE:

Whatever method is used, the net profit on containers will be the same

Treatment of container records in the financial statements

In the statement of financial position, the value of stock at premises and in hands of customers is reported as current assets, while deposits of returnable containers is reported as a current liabilities.

Statement of financial position (extract)

Details	TZS
Assets	
Current assets	
Value of stock at premises	xx
Value of stock in hands of customers	xx
Liabilities	
Current liabilities	
Deposits of returnable containers	xx

Exercise 3.2

1. Nyumbani Company supplies gas in expensive returnable containers. These containers cost TZS 50,000 each and are charged out to customers on sale or return within three months at TZS 65,000 each. Provided they are returned within the three months period they a credited at TZS 57,500 each.
   At the end of the year 2021, Nyumbani Company values all returnable containers in customers' hands and at the premises at TZS 40,000 each.

   You are also given the following information:

	January, 2021	December, 2021
Containers held by the company	1,380	1,572
Returnable containers held by customers	2,395	1,455

   During the year 2021, 1,550 new containers were purchased, 10,310 were invoiced to customers and 8,980 were returned. On inspection 130 containers required repairs costing 812,500 and 28 had to be sold as scrap for 150,000.

   Required:

   Use the provided information to prepare containers stock account and containers suspense account for the year ended 31st December, 2021.

2. Wahasibu Ltd. sells its goods in returnable containers. These containers are purchased at TZS 3,000 each. All containers are valued at TZS 2,250 each whether they are still in stock or in the hands of customers. Containers are charged out to customers at TZS 3,750 each. A customer is credited with TZS 2,700 per container if retuned in good condition within six months of receipt.

You are given the following information regarding stock of containers:

Stock as at 1st April, 2018	Containers
Containers held by the company	2,500
Returnable containers held by customers	500

The following additional information relates to the year ended 31st March, 2019

(a) During the year 3,750 containers were purchased;
(b) 10,000 containers were issued to customers;
(c) 8,750 containers were returned by customers within the time limit;
(d) 750 containers were not returned by the customers within the time limit. These were considered as kept by the customers permanently;
(e) 250 containers were scrapped and sold for TZS 450,000;
(f) TZS 1,050,000 was spent on repairs of containers; and
(g) On 31st March 2019, 1000 containers were in possession of customers.

Required: Prepare the following accounts using container suspense method:
(i) Containers stock account; and

(ii) Containers stock suspense account for the year ended 31st March, 2019.

3. Wajumbe Ltd. dispatched its products to customers in wooden crates. The crates are bought from manufacturers at TZS 1,500 each but are valued for stock purposes at TZS 1,000 each. Customers are charged a deposit of TZS 2,500 per crate, TZS 2,000 of which is refunded when the crate is returned. At the beginning of 2020, Wajumbe Ltd., was holding 3,500 crates on its premises, whilst 2,920 were held by customers. The corresponding figures at the end of the year 2020, showed that crates held in Wajumbe Ltd. premises were 6,042 and 3,966 crates were with the customers.

During the year ended 31st December, 2020, the company bought 4,000 crates, charged out 11,326 crates to customers and made refunds on 10,208, of the remainder, 340 crates were scrapped and 72 were retained by customers. The company incurred TZS 25,700 for repairs.

Required:
Prepare the crates stock and crates suspense accounts for the year ended 31st December, 2020.

Chapter summary

1. A container is anything in which goods are contained. Some containers are returnable by the customer after use, while others are disposed-off by the customer after using-up the product contained.
2. Containers are purchased at a purchase rate (PR), and charged out to customers at a charge out rate (CR). If returned in good condition and within the agreed time period, customers are refunded at a refund rate (RR), which is part of the charge out rate. Containers in store at the warehouse or in the hands of customers whose agreed time have not expired are valued at valuation rate by the supplier at the end of the accounting period. The hiring charge is the difference between charge-out rate and refundable rate, which stands as a profit to the supplier on containers dealings.
3. There are mainly two accounts opened by the supplier when dealing with returnable container business. These are container stock account - for establishing the profit earned on containers; and container suspense account – for keeping track of containers in hands of customers.
4. The hiring profit is transferred to income statement, while containers in stock (both in the warehouse and in customers' premises) are shown as current assets in the statement of financial position. Deposits of returnable containers is reported as a current liabilities.

Revision exercise

1. What is meant by "returnable container" as applied in accounting?
2. Explain any four (4) points that differentiate returnable containers from non-returnable containers.
3. Describe the accounting treatments for non-returnable containers.
4. Briefly elaborate the following terms as applied in container accounts:
    (i) Hiring charge;
    (ii) Charge-out rate;
    (iii) Hiring profit;
    (iv) Valuation rate;
    (v) Refundable rate; and
    (vi) Returnable rate.

5. Explain the purpose of maintaining the following accounts:
   (i) Container stock account; and
   (ii) Container suspense account.

6. Mawazo Chemical Ltd. supply their products in returnable containers. A container is invoiced to customers for TZS 8,000 but if returned within two months a credit of TZS 7,000 is given to the customer. A container costs TZS 7,000 and its estimated life is 6 years at the end of which scrap value is likely to be TZS 1,000. The following information is also made available:

Details	Units
Containers with customers (1st Jan 2018)	5,000
Containers in stock (1st Jan 2018)	7,000
Containers sent to customers during the year 2018	30,000
Containers returned by customers	31,500
Containers returnable	3,000
Containers purchased during the year	5,000
Containers condemned during the year, useful life being over	750
Depreciation is to be provided on straight line basis	

Required:

Prepare containers stock and containers suspense accounts of Mawazo Chemical Ltd. for the year ended 2018, assuming that the condemned conatiners were sold, realising TZS 400,000/=

7. RIYAZ Ltd. despatched its products to customers in bulk using plastic crates. The crates are bought from the manufacturers at TZS 1,500 each but are valued for stock purposes at TZS 1,000 each. A customer is charged a deposit of TZS 2,500 per crate, of which TZS 2,000 is refunded when the crate is returned. At the beginning of 2019, RZ Ltd. was holding 1,750 crates on its premises, whilst customers held 1,460. The corresponding figures at the end of the year were 3,021 and 1,983 crates respectively. During the year 2019, the company bought 2,000 crates, charged out 5,663 crates to customers and made refunds on 5,104. Among the remaining crates, 170 were scrapped and 36 were retained by customers. The company incurred TZS 857,000 in making damaged crates re-usable.

Required:

Prepare the crates stock and crates suspense accounts for the year 2019.

8. Meremeta Traders Ltd., supply their products in returnable drums which are charged TZS 20,000 each. If the drums are returned in good condition within one month, customers are credited with TZS 18,000. The following information relate to drum trading for the year 2022.

	Number of drums
Returnable drums in hands of customers on 1st January, 2022	8,000
Drums in the firm's premises	16,000
Drums purchased during the year at TZS 15,000 each	20,000
Drums sent to customers during the year	300,000
Drums returned by customers during the year	288,000
Returnable drums in hands of customers as at 31st December, 2022	15,000
Scraped drums sold for TZS 10,000,000	2,000

All drums as on 31st December, 2021 and 31st December, 2022 are to be valued at TZS 10,000 each. All the amounts due in respect of drums have been collected from the customers.

Required:

Using the container depreciation method, you are required to prepare the following ledger accounts for the year ended 31st December, 2022:
(a) Drum Stock account;
(b) Drums suspense account; and
(c) Profit and loss account.

9. MAJI YETU Ltd., is a business firm dealing with production, packaging and distribution of drinking water in returnable bottles of twenty (20) liters each. On 1st January, 2020, a trader had a stock of 375 bottles at a cost price of TZS 3,000,000; out of these, bottles costing TZS 600,000 were in the hands of customers. When sending water to customers, the bottles are charged at cost plus 25%, and when returned in good condition, a customer is credited with 95% of the charge out rate. During the year, bottles costing TZS 784,000 were bought, and bottles at a cost of TZS 1,200,000 were dispatched to customers. A total of 127 bottles were returned by customers and their accounts credited.

At the end of the year, stock of bottles in the hands of customers were 68 bottles. It is the firm's policy to value bottles in the firm's store at TZS 6,500 each, at the end of each accounting period.

Required: Prepare the bottles stock account and bottles trading account in the books of MAJI YETU Ltd.

10. On 1st January 2021, stock of packages in hand was TZS 8,000,000 (valued in the books at cost less 25%), and TZS 1,200,000 in the hands of customers at invoice price, which is cost plus 50%. For the year ended 31st December, 2022, packages were charged at cost plus 50% and full credit was given in respect of those returned in good condition.

    Packages sent out during the year were TZS 16,000,000 (at invoice price) and returns (all in good condition) TZS 10,000,000. Customers retained packages at an invoice price of TZS 300,000 and closing stock of packages in hand at cost TZS 6,666,670.

    Required: Write-up the packages stock account and packages trading account.

Chapter Four

Stock valuation

Introduction

Valuation of stock is undertaken to determine the value of stock to be included in the statement of financial position. In this chapter you will learn about the concept of stock and stock valuation, stock taking system, stock measurement and stock valuation methods. You will also learn about stock estimation, stock valuation and insurance claim, stock group valuation and the effects of stock errors in the financial statements. The competencies developed will enable you to perform stock valuation for different business undertakings, identify any stock discrepancies in the accounting records and determined the amount of insurance claim for loss incurred against an insured stock.

Concept of stock and stock valuation

Meaning of stock

Stock in accounting is defined as the items/products left unsold at the end of a particular period. However, stocks can also be used to refer to items held to be used for production purpose, like raw materials, but also items/products that are in a process of production (work in progress). The International Accounting Standard (IAS) number 2 provides a standard definition of stocks which are also referred to as inventories that, they are “assets either, held for sale in the ordinary course of business; or in the process of production for such sale; or in the form of materials or supplies to be consumed in the production process or in the rendering of services”.

Classification of stock

The standard definition of stock/inventory as per IAS 2 leads to inventory being classified into three categories, namely: raw materials, work in progress, and finished goods. These are further explained in detail as:

Raw materials: are factors of production which are inputs that a business needs in the production process. They are of different forms depending on the nature of the business in question. Raw material could be direct as well as indirect materials. Direct materials are those materials which are used in the manufacturing process, and they form part of the final products example timber in the carpentry business; cotton in textile industry and flour in baking business. On the other hand, indirect materials do not form part of the finished goods, but they are consumed as goods are being produced example use of oil to lubricate machines and use of glue to seal boxes of packing clothes in textile firm.

Work in progress: are the items which are midway through the production process. They include items which are unfinished (partly complete) by the end of the accounting period. Example of work in progress is a partly complete building for a real estate business and undecorated cake in the baking business.

Finished goods: are the output of the production process. They are the essence of the production process. Though they are finished but they could form part of an input resources in the production of another products. Examples include a complete table for a carpentry business and decorated cake in the baking business.

Example 4.1

For a computer and related peripherals retailer, which of the following are not inventories?

(a) Desktops and Laptops held for sale;
(b) Computer hard disks, microchips, pen drives and cords held for sale;
(c) Both (a) and (b);
(d) Desktops used by staff for processing customers' orders;
(e) (a), (b) & (d).

Answer

The correct answer is (d). Computers which are being held for sale and computer hard disks, microchips, pen drives and cords are all items which are held for sale. The desktops used by staff for processing customers' orders are not held for sale, they are not used directly or whole and exclusively in the production nor are they in the production process. Hence, they are not part of inventory.

Meaning of stock valuation

Stock valuation is the determination of the value of inventory on hand at a particular date. The purpose is to determine the value of inventory to be included in the financial statements. It also helps in identifying the value of inventory damaged or lost for insurance compensation purposes.

Inventory valuation involves establishment of the physical existence and ownership of the inventory items, determination of unit cost of the items and calculation of provisions in reducing the inventory cost to net realisable value where necessary. IAS 2 requires that all items of inventory be measured at the lower of cost and net realisable value. These terms are to be explained later in this chapter.

Exercise 4.1

1. Define the terms inventory and inventory valuation.
2. Tyres used in the manufacture of cars are work-in-progress. Is this statement true or false? why?

Stock taking

Stock-taking as part of the inventory valuation, is the process of determining the actual quantity of inventory on hand at a particular date, usually the end of an accounting period, and their physical existence. Stock-taking, therefore, helps to check the quantitative accuracy of the inventory records maintained by the business. The value of inventory is established basing on the quantity given by the inventory record. However, sometimes physical counts may differ with the inventory records, in this case, the business has to investigate the reason for the difference and adjusts the books of accounts accordingly. An example of a stock taking sheet is provided as a specimen in figure 4.1.

Stock-taking sheet

Sheet No.		**Date:**		
Performed by:		**Department:**		
Inventory No.	**Item description**	**Purchase price**	**Quantity**	**Location**
Signature:				

Figure 4. 1: *Stock taking sheet*

Stock management systems

To smoothen the stock-taking exercise and valuation of inventories, systems have to be in place to coordinate/manage this exercise. These systems are referred to as stock management systems. There are mainly two (2) systems which ideally are the ways through which businesses maintain their inventory records. These include the periodic and the perpetual stock management systems.

Periodic stock management system

Under this system, stock-taking and valuation is done after a certain period, for example; monthly, quarterly, semi-annually or annually. Essentially this process determines the ending inventory by physical counting of the amount of goods in the store at a particular period.

This system suits businesses which sell many kinds of goods of relatively low costs per unit. For example, minimarkets, supermarkets and hardware stores.

Perpetual stock-taking system

Under this system stock-taking and valuation is done continuously i.e., after every transaction. The business records all inventory movements (inflows and outflows) in the inventory ledger. The system provides a continuous information regarding the costs of sales and remaining inventory on hand. This is done by having a subsidiary ledger for inventory where an account for each item of merchandize is kept. It is therefore, easy to determine the amount of goods consumed or sold by simply consulting the ledger.

In a perpetual system the following journal entries will be made:

No.	Details	Dr.	Cr.
1.	Stock Creditor *(Being credit purchases of merchandize)*	xx	 xx
2.	Debtors Sales *(Being credit sales of merchandize)*	xx	 xx
3.	Cost of sales Stock *(Being cost of merchandize sold)*	xx	 xx

This system is suitable for business with fewer sales of relatively high value items. For example, motor vehicles, office equipment, household appliances and furniture.

Note:

It is not possible to use perpetual and periodic system at the same time. When the two systems are compared, the perpetual stock-taking system offers some extra advantage. That is, it provides a readily available up-to-date information about inventory movements and inventory levels, and if it is to be supplemented by stock counts, it provides information about incidence and scale of unexpected decrease in inventory (inventory shrinkage).

Example 4.2

1. Which of the two systems of maintaining inventory records is suitable for small organisations?
   (a) Periodic inventory
   (b) Perpetual inventory
   (c) Both (a) and (b)
   (d) Neither (a) or (b)

Answer

1. The answer is (a), because small business find it convenient to conduct physical counting once in a certain period, rather than every time on a continuous basis. This is because most of the small businesses are characterized by a large number of items being sold, that makes difficult, time consuming and even costly to conduct stock taking on perpetual basis.

Exercise 4.2

1. Explain the term stock-taking.
2. State the differences between perpetual and periodic stock-taking systems.
3. What are the conditions that makes a trader to choose perpetual inventory system over the periodic system?

Stock valuation methods

After determining the physical quantities of stock, next step is to assign costs to each item so as to obtain the value of closing stock to be included in the financial statements. The methods used to establish the value of stock at a particular time are referred to as stock valuation methods.

There are standard methods of assigning costs to the quantities of stocks at hand in order to establish their values. The IAS2 requires that, the cost of the stock item to be ascertained by specific identification of the individual costs. That is, each item of stock should be considered separately and its cost should be established individually. Alternatively, IAS2 allows the cost of stock to be established using the First In First Out (FIFO) method and the weighted average costs method.

First In First Out (FIFO) method

In this method, stocks are valued on assumptions that items received first in the store will be consumed or issued first from the store. Consequently, materials received last will be consumed or issued last from the store. In this method, the ending stock is assumed to be made up of latest purchases, and therefore, at the latest cost prices. This is the rational theory for most business and represents a natural flow of items.

Advantages of FIFO

(a) Easy to understand and use;
(b) Consistent with the normal procedure of issuing the items that were received first;
(c) The value of closing stock will be close to the market price;
(d) Makes manipulation of reported income difficult.
(e) There is no ambiguity on the values to be included in the cost of goods sold.

Disadvantages of FIFO

(a) Overstates profits especially during inflation which may attract heavy tax charges;
(b) Does not work effectively, if many units are purchased during the period at different rates;
(c) Understates the current production cost if prices of materials are rising rapidly; and
(d) Under certain circumstances , more than one price has to be adopted.

To use FIFO method, the entity has to keep proper record of issues and receipts of items of inventory, otherwise the valuation of stock will not be possible.

Weighted average cost method

To overcome the challenges (refer to the disadvantages) posed by FIFO, a business can deploy another method of valuation which is called weighted average cost method. In this method materials are issued at the average price of purchases. Stock is valued on the basis of the average price paid for the goods, weighted to quantity purchased at each price.

Formula; -

$$\text{Weighted average cost} = \frac{\text{Total cost of purchases} + \text{Value of opening stock}}{\text{Total number of units available for sale}}$$

Where:_

Total number of units available for sale = opening stock + purchases

Note: weighted average cost is re-calculated on periodic basis or as each additional inventory is received.

Advantages of weighted average cost method

(a) It is consistent and logical;
(b) Fluctuation in prices have no significant effect on the cost of issues of stock; and
(c) The issue process does not need to be calculated unless new materials are received.

Disadvantages of weighted average cost method

(a) It involves a lot of clerical work;
(b) It is complex and inconvenient when prices change frequently; and
(c) The average cost is not the actual price and therefore it is not realistic.

Example 4.3

Mzee Busara deals with buying and selling of door carpets. The following transactions relate to his purchases for the year to December, 2020:

Date	Units sold	Units purchased	Unit cost (TZS)	Total cost (TZS)
5th January, 2020		120	6,000	720,000
10th February, 2020	120			
28th March, 2020		280	6,200	1,736,000
03rd April, 2020	160			
10th April, 2020		160	6,300	1,008,000
20th May, 2020	80			
30th June, 2020		240	6,400	1,536,000
10th July, 2020	200			
4th August, 2020	100			
28th August, 2020		400	6,600	2,640,000
02nd September, 2020	220			
10th November, 2020		100	6,800	680,000
20th December, 2020	280			
Total	**1,160**	**1300**		**8,320,000**

Stock in hand at 31st December, 2020 was 140 units (1,300 – 1,160). Total sales for the year were TZS 9,000,000.

Required:

Calculate the value of closing stock and cost of sales using FIFO and weighted average cost under periodic inventory system.

Solution

(a) *FIFO method under periodic stock-taking system:*

Under this method, the closing stock of 140 units will be made up of the most recent units to enter the store (recent purchases). So, the 100 units will be based on 10th November purchases and the balance 40 units will relate to 28th August, 2020 purchases.

The value of closing inventory of 140 will be:

Month	Units	Unit costs (TZS)	Total costs (TZS)
November	100	6,800	680,000
August	40	6,600	264,000
	140		**944,000**

The cost of goods sold will be calculated as follows:

Total purchases	8,320,000
Less: Closing stock	(944,000)
Cost of sales	7,376,000

(b) *Weighted average cost method under periodic stock-taking system:*

This method uses weighted average costs for the year, calculated as follows:

$$\text{Weighted average cost} = \frac{\text{Total cost of purchases} + \text{Value of opening stock}}{\text{Total number of units available for sale}}$$

$$\text{Weighted average cost} = \frac{8{,}320{,}000 + 0}{1{,}300} = \text{TZS } 6{,}400 \text{ per unit}$$

Value of closing stock = 140 units × TZS 6,400 per unit = TZS 896,000

The cost of sales will be:

Total purchases	8,320,000
Less: Closing stock	(896,000)
Cost of sales	7,424,000

Example 4.4

Use the information provided in example 4.3 to prepare a stock valuation sheet using FIFO and weighted average cost under perpetual stock-taking system.

Solution

In a perpetual stock system, a stock record card (stock sheet) must be used. This card records purchases and sales of stocks, and help to determine the quantity and value of closing stock at the end of the reporting period. This will be as follows:

(a) *FIFO method in perpetual stock-taking system*

Stock valuation sheet for the door carpets

Date	**PURCHASED**			**SOLD**			**BALANCE**		
2020	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**
5th January	120	6,000	720,000				**120**	**6,000**	**720,000**
10th February				120	6,000	720,000	0	0	0
28th March	280	6,200	1,736,000				**280**	**6,200**	**1,736,000**
3rd April				160	6,200	992,000	120	6,200	744,000
10th April	160	6,300	1,008,000				120	6,200	744,000
							160	6,300	1,008,000
							280		**1,752,000**
20th May				80	6,200	496,000	40	6,200	248,000
							160	6,300	1,008,000
							200		**1,256,000**

30th June	240	6,400	1,536,000				40	6,200	248,000
							160	6,300	1,008,000
							240	6,400	1,536,000
							440		**2,792,000**
10th July				40	6,200	248,000			
				160	6,300	1,008,000	**240**	**6,400**	**1,536,000**
4th August				100	6,400	640,000	140	6,400	896,000
28th August	400	6,600	2,640,000				400	6,600	2,640,000
							540		**3,536,000**
2nd September				140	6,400	896,000			
				80	6,600	528,000	**320**	**6,600**	**2,112,000**
10th November	100	6,800	680,000				320	6,600	2,112,000
							100	6,800	680,000
							420		**2,792,000**
20th December				280	6,600	1,848,000	40	6,600	264,000
							100	6,800	680,000
	1300		**8,320,000**	**1160**		**7,376,000**	**140**		**944,000**

Cost of sales will be:

Total purchases		8,320,000
Less: Closing stock		(944,000)
Cost of sales		7,376,000

(b) *Weighted average cost method in perpetual stock-taking system*

In perpetual system, the weighted average cost is calculated each time purchases are made. This changes the average previously calculated and hence turn it into moving average. The value of closing stock will be:

Stock valuation sheet for door carpets

Date	PURCHASED			SOLD			BALANCE		
2020	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**	**Units**	**Unit cost (TZS)**	**Total cost (TZS)**
5th January	120	6,000	720,000				**120**	**6,000.00**	**720,000**
10th February				120	6,000	720,000	-	-	-
28th March	280	6,200	1,736,000				**280**	**6,200.00**	**1,736,000**
3rd April				160	6,200	992,000	120	6,200.00	744,000
10th April	160	6,300	1,008,000				160	6,300 .00	1,008,000
							280	**6,257.14**	**1,752,000**
20th May				80	6,257	500,571	**200**	**6,257.15**	**1,251,429**
30th June	240	6,400	1,536,000				240	6,400.00	1,536,000
							440	**6,335.07**	**2,787,429**
10th July				200	6,335	1,267,014	**240**	**6,335.06**	**1,520,415**

4th August				100	6,335	633,507	140	6,335.06	886,908
28th August	400	6,600	2,640,000				400	6,600.00	2,640,000
							540	**6,531.31**	**3,526,908**
02nd September				220	6,531.3	1,436,888	**320**	**6,531.31**	**2,090,020**
10th November	100	6,800	680,000				320	6,531.31	2,090,020
							100	6,800.00	680,000
							420	**6,595.28**	**2,770,020**
20th December				280	6,595.3	1,846,678	140	6,595.30	923,342
	1300		**8,320,000**	**1160**		**7,396,658**	**140**	**6,595.30**	**923,342**

Cost of sales will be:

Total purchases	TZS 8,320,000
Less: Closing stock	TZS (923,342)
Cost of sales	TZS 7,396,658

Example 4.5

Make use of the information provided in example 4.3 and 4.4, to compare the profits obtained under the two stock valuation methods.

Solution

(a) Comparison between FIFO and weighted average cost in periodic stock-taking system

Details	**FIFO**	**Weighted average cost**
Sales	9,000,000	9,000,000
Less: Cost of sales	(7,376,000)	(7,424,000)
Gross profit	**1,624,000**	**1,576,000**

The effect of valuation method choice onthe financial statement

During the period of raising prices, FIFO method results in higher profit as compared to weighted average cost method. This is because the closing stock is assigned higher values or recent prices. It is important to note that: cost of sales = opening stock + purchases – closing stock, so the higher the value of closing stock the lower the cost of sales and the higher the gross profit reported.

(b) Comparison between FIFO and weighted average cost in perpetual stock-taking system

Details	**FIFO**	**Weighted average cost**
Sales	9,000,000	9,000,000
Less: Cost of sales	(7,376,000)	(7,396,658)
Gross profit	**1,624,000**	**1,603,342**

Profit reported under FIFO method is higher than in weighted average cost, this is due to the same reason as explained in part (a) above. Closing stock under FIFO is valued at recent prices which are relatively higher during the period of rising prices or inflation.

It is worth noting that, the value of closing stock, cost of sales and profit is the same when using FIFO method under both periodic and perpetual stock-taking systems. However, those results will be different under weighted average cost, because, under perpetual system the value of closing stock will be last value determined by the moving average of the prices during the entire period, while under periodic system it will be average of total purchases and the opening stock.

Generally, a business can use any method of costing (valuation) provided that they maintain consistency. If they change the method, then this should be disclosed in the notes to show the reason for change and the effect of such change in the financial statements.

Exercise 4.3

1. Stock and purchasing data for inventory held by Hekima Company, for the year 2018, was as follows:

1st January, 2018	Opening stock	200 units at TZS 2,000
15th April, 2018	Purchases	500 units at TZS 2,200
10th July, 2018	Purchases	750 units at TZS 2,400
1st October, 2018	Purchases	900 units at TZS 2,600
31st December, 2018	Closing stock	200 units

Required:
Determine the cost of closing stock and cost of sales for the year 2018, under both periodic and perpetual system using FIFO.

2. Inventory data for items stocked by Janja Electronics, for the month of June, 2019 are as follows:

Date	Details	Units	Unit cost	Total cost
01st June, 2019	Opening stock	3,000	3,000	9,000,000
03rd June, 2019	Purchases	1,500	3,300	4,950,000
18th June, 2019	Sales	2,000	-	-
27th June, 2019	Purchases	3,500	3,200	11,200,000
31st June, 2019	Sales	4,000	-	-
30th June, 2019	Sales	3,500	-	-

Required:

(a) Compute the cost of sales during June and the closing stock as at 30th June, 2019 using the perpetual system and FIFO method.

(b) Compute the cost of sales during June and the closing stock at 30th June, 2019 using the perpetual system and periodic method.

3. The following are stock record for Mjini Stores during September, 2018 which uses perpetual stock-taking system:

Date	Details	Units	Unit cost	Total cost
01st September, 2018	Opening stock	2,000	700	1,400,000
08th September, 2018	Purchases	1,250	735	918,750
13th September, 2018	Sales	1,000	-	-
21st September, 2018	Sales	1,250	840	1,050,000
22nd September, 2018	Purchases	1,500	-	-
30th September, 2018	Sales	1,750	-	-

Required:

(a) Record the stocks, purchases, and cost of sales on a stock sheet using FIFO method.

(b) Record the stocks, purchases, and cost of sales on a stock sheet using weighted average cost method.

(c) Calculate the profits using FIFO and weighted average cost, and state reasons for their differences.

Measurement of stock

After establishing the value of stock, it is important to determine the value at which the stock should be recognized in financial statements. The value of stock in hand may fall due to physical deterioration, shop wear or obsolescence. This means, the cost of stock at the reporting date may be different from the amount the business can receive on selling such stock. In that case, it is important to ensure the value presented in the financial statements reflect the reality and conforms to the prudence concept. Prudence concept is the principle of estimating possible losses from a transaction. Based on that, closing stock should be valued (reported) in the financial statement at the lower of cost and net realisable value (NRV).

IAS 2 defines cost to mean all the costs of purchasing the stock including taxes, costs for converting materials into finished goods and costs of bringing the assets to their present location and condition. It also defines net realisable value as simply the selling price of the stock less the costs of making that sale.

Example 4.6

Ladies' shoes were bought at TZS 18,000 per pair, and were then sold for TZS 20,000 in the ordinary course of business. During the year-end stock taking, 10 pairs of shoes were identified as damaged, and they need to be repaired at a cost of TZS 1,000 per pair before they could be sold at a reduced price of TZS 17,500 each.

Required:

(a) Determine the cost of the damaged shoes.

(b) Determine the net realisable value of the damaged shoes.

(c) Determine the value of the shoes to be reported in the financial statement.

(d) Assuming the shoes could be sold for TZS 19,500 after repair, at what value should the shoes be included in the financial statement.

Solution

(a) The cost of shoes = Purchases costs + Associated costs
The cost of damaged shoes = TZS 18,000 × 10 = **TZS 180,000**

(b) The net realisable value of shoes = Sales proceeds – Cost of making sales
Sales proceeds = 17,500 × 10 = TZS 175,000
Cost of making the sales = Repairs costs = TZS 1,000 × 10 = TZS 10,000
The net realisable value = TZS 175,000 – TZS 10,000 = **TZS 165,000**

(c) The value to be included in the financial statement
The value = the lower between cost and net realisable value
The lower between the two is TZS 165,000
The vale to be included in the financial statement = **TZS 165,000**

(d) The cost remains the same **TZS 180,000**
Net realisable value = (TZS 19,500 × 10) – TZS 10,000 = TZS 185,000
The lower between the two is **TZS 180,000.** Hence, stock should be recorded at this figure.

Example 4.7

Which one of the following should be taken as value of closing inventory as at 31st December, 2021?

(a) Cost at 31st December, 2021 = TZS 100,000
(b) NRV at 31st December, 2021 = TZS 150,000
(c) Cost at 1st January, 2021 = TZS 50,000
(d) NRV at 1st January, 2021 = TZS 40,000

Answer

The correct answer is (a). Stock should be reported at the lower of cost and NRV as at 31st December, 2021. At 31st December, 2021 the cost is TZS 100,000 and NRV is TZS 150,000, the lower between the two is TZS 100,000.

Exercise 4.4

1. Blue Dental Care Ltd. is a business firm involved in the manufacture of dental care products like toothpaste, toothbrush, and mouthwash. As at 31st August, 2019, the stock in store had a total cost of TZS 13,200,000, and a total sales value of TZS 15,000,000. The medical regulator has inspected the store, and requires Blue Dental Care Ltd. to pack its entire inventory according to the recommended design. This requirement will cost a total of TZS 2,200,000 to pack its entire stock.

   Required:
   Calculate the net realisable value of Blue Dental Care's stock.

2. The following are the items of inventory held by Mtavangu in his store as on 31st December, 2021:

Item	Number of items in store	Per unit cost (TZS)	Per unit NRV (TZS)
P	120	15,000	18,000
Q	80	75,000	67,500
R	154	9,000	12,000

   Required:

   Compute the total value of Mtavangu's stock to be reported in financial statements.

3. Msami held 200 pieces of mosquito nets in store at a cost of TZS 8,000 each. Each mosquito net can be sold at a price of TZS 10,000 after paying TZS 500 to pack each net.

   Required:

   (a) Determine the total net realisable value; and
   (b) Value to be considered for reporting.

Stock error

Stock error happens when the actual quantity of stock available differs from the quantity in records. This negatively affects the financial statements as may result into wrong computation of the cost of sales, and closing stock, and the resulting profit/loss amount.

Situations that may cause stock error

There are various causes of stock error including the following:

Theft: Stealing of items in the store reduces the quantity available in the store and cause the records of the store to differ with the stock records.

Unreported product damage: Damaged products may be removed from the store without being reported. This makes the amount shown in the system different from actual items in the store.

Human error: This may occur during labelling, counting and recording of the items in the store, as a result, this may cause the records to differ with the actual items available.

Misplaced inventory (location error): This occurs when items are received in stock and then placed in the wrong shelf or bin. Customers may also cause this if they pick products and place them in a different location.

Mismanagement of returns: When returns are not properly coded and placed in the inventory. This results into inaccurate records of stocks and returns.

Ways to minimize stock errors

To prevent stock error, one should control every step that involves the stock and improve the stock's security. Below are some ways that can be adopted to minimize the stock error:

Improve security: There are various ways to improve security at business premises. One modern way is the installation of surveillance cameras. These can also be supported by the use of mirrors that can be placed in the corners and some less visible areas to help give extra sightlines for easy monitoring of staff from different angles. When thieves find out that they might be caught on camera, they can consider not to steal.

Double-check system: The best way to minimize mistakes in stock records is to incorporate a double-check system when receiving inventories. An automated single system can also be installed for data transfer from one system to another.

Hiring the best employees: Find employees who are good fit for your firm. Apart from candidate's face to face interview, academic performance and experience, it is better to check the references to make sure they worked well with others in their previous jobs and get evidence of their honesty and dedications.

Stock auditing: Make frequent stock auditing processes, like daily stock counting to minimize human error and provide more accurate and up-to-date stock data. For more accurate financial data, the business management can organize audits by category and count stocks by samples on a predictable schedule.

Go paperless: Provide the responsible staff with right inventory tools for the stock management process. In modern world, inventory management need paperless transactions for invoices and purchase orders to replace manual inventory documentation, which is subject to human error. Modern software solutions like barcode scanning or RFID technology track items as they move through the warehouse.

Conduct regular inspections:
The management should make regular inspection to the warehouse at regular intervals so as to ensure things are remaining optimized.

Effect of stock error on the income statement

Stock error affects the cost of sales and net profit reported by the company. An error in the value of stock, means error in the value of cost of sales and net income. These errors may cause the cost of sales and net profit to be either overstated or understated. Net profit and closing inventory are also reported in the statement of financial position as part of retained earnings and current assets respectively, this means the statement of financial position is also distorted as a result of a wrong figure of inventory.

Stock error relating to closing inventory will always affect two financial years. If the company misstate the closing inventory in the current year, it will carry this misstatement in the next year, because the closing inventory of current year is the opening inventory of the next year. In two years, the stock error effect will automatically cancel out. This is because if the current year's profit is understated due to an understatement of the closing stock value, the next year's profit will be overstated by the same value. Practically, the closing stock value of this year, is the opening stock of the next year. Note that, understating the opening stock values makes the cost of goods lower, hence, higher profit figure. Therefore, assets and retained earnings of the third year will be properly stated in their correct figures.

The effect of the stock error on the income can be summarized as follows:

Stock error	**Cost of goods sold**	**Gross profit**	**Net profit**
Understate ending stock	Overstated	Understated	Understated
Overstate ending stock	Understated	Overstated	Overstated
Understate opening stock	Understated	Overstated	Overstated
Overstate opening stock	Overstated	Understated	Understated

Example 4.8

The following is the summary statement of profit or loss of Ndindi Traders for two years:

Details	**2017**		**2018**	
	TZS	**TZS**	**TZS**	**TZS**
Sales		800,000		1,200,000
Cost of goods sold:				
Opening stock	100,000		200,000	
Add: Purchases	720,000		980,000	
Cost of goods available for sale	820,000		1,180,000	
Less: Closing stock	200,000	620,000	180,000	1,000,000
Goss profit		180,000		200,000
Less: Operating expenses		80,000		140,000
Net income		**100,000**		**60,000**

On investigation of the records, it was found that the ending inventory for the year 2017 was overstated by TZS 40,000.

Required: Prepare the correct statement of profit or loss for 2017 and 2018.

Solution

Corrected statement of profit or loss

Details	2017		2018	
	TZS	TZS	TZS	TZS
Sales		800,000		1,200,000
Cost of goods sold:				
Opening stock	100,000		160,000	
Add: Purchases	720,000		980,000	
Cost of goods available for sale	820,000		1,140,000	
Less: Closing stock	160,000	660,000	180,000	960,000
(200,000-40,000)				
Goss profit		140,000		240,000
Less: Operating expenses		80,000		140,000
Net income		**60,000**		**100,000**

Example 4.9

Use the information provided in example 4.8, to prepare the correct statement of profit or loss for 2017 and 2018 assuming opening and closing inventories for 2017 were understated by TZS 40,000.

Solution

Corrected statement of profit or loss

Details	2017		2018	
	TZS	TZS	TZS	TZS
Sales		800,000		1,200,000
Cost of goods sold:				
Opening stock	140,000		240,000	
(100,000 + 40,000)				
Add: Purchases	720,000		980,000	
Cost of goods available for sale	860,000		1,220,000	
Less: Closing stock	240,000	620,000	180,000	1,040,000
(200,000 + 40,000)				
Goss profit		180,000		160,000
Less: Operating expenses		80,000		140,000
Net income		**100,000**		**20,000**

Exercise 4.5

Use the information in example 4.9 to prepare the correct statement of profit or loss for the years 2017 and 2018 assuming that:

(a) Opening and closing inventories for 2017 were overstated by TZS 35,500; and

(b) Ending inventory for the year 2017 was understated by TZS 35,500.

Stock estimation

This is the process of determining the stock in hand when the business does not use perpetual inventory system and physical stock taking is not desired or feasible. When the business uses periodic inventory system it is administratively cumbersome and costly to determine the quantity of inventory on hand unless a physical stock-taking is done at that particular time. This is because in this system, no detailed flows of inventories are maintained. To overcome this problem, the business may make estimations of the figures of closing inventory.

Usually, estimation is necessary when goods are lost either because of theft, fire, breakages, or natural deterioration and evaporation; or when financial statements are prepared on monthly or quarterly basis. In these cases, it is difficult and costly to make physical count of all the items in the store, hence the convenient way is to estimate. The estimation can be done using one of the following two (2) common methods: gross profit method and retail method.

Gross profit method

This method uses the gross profit rate to find the amount of gross profit and cost of sales. In this method, the estimated inventory cost at the end of the period, is calculated by deducting the cost of sales from the figure of cost of goods available for sale. To use this method the company needs to know the sales revenue, cost of goods available for sale and gross profit rate.

This method assumes that all sales are made at a constant gross profit rate.

There are two gross profit ratios that can be used under the gross profit method, these are mark-up and margin.

(a) Mark-up

This is the percentage of gross profit on cost of sales.

$$\text{Mark-up} = \frac{\text{Gross profit}}{\text{Cost of sales}} \times 100$$

Alternatively:

$$\text{Mark-up} = \frac{\text{Gross profit}}{\text{Sales - Gross profit}} \times 100$$

(b) *Margin*

This is the percentage of gross profit on sales calculated as:

$$\text{Margin} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

Alternatively:

$$\text{Margin} = \frac{\text{Gross profit}}{\text{Cost of sales + Gross profit}} \times 100$$

However, the mark-up percentage can be changed into margin, or margin percentage to mark-up using the following guidance:

$$\text{Changing mark-up to margin} = \frac{\text{Numerator}}{\text{Numerator + Denominator}} \times 100$$

$$\text{Changing margin to mark-up} = \frac{\text{Numerator}}{\text{Denominator - Numerator}} \times 100$$

Example 4.10

Mwembeni shoe traders, sell their products (ladies shoes) at a mark-up of 25%. One customer have just paid them TZS 40,000 being price of the pair of shoes she has taken. Mwembeni shoe traders are struggling to know how much percentage of profit they have made from that sale.

Required:

Calculate the percent of profit on sale (margin), and state the amount of profit.

Solution

Margin is the percent of gross profit on sales value

Sales = TZS 40,000

But:

Mark-up is the percent of gross profit on cost of sale = 25% = $\frac{25}{100}$

$$\text{Changing mark-up to margin} = \frac{\text{Numerator}}{\text{Numerator + Denominator}} \times 100$$

Numerator = 25 and the denominator = 100

Therefore:

$$\text{Changing mark-up to margin} = \frac{25}{25 + 100} \times 100 = \frac{25}{125} \times 100$$

$$= \frac{1}{5} \times 100 = 20\%$$

Margin = 20%

Gross profit on sale of a pair of shoes = TZS 40,000 × 20% = **TZS 8,000**

Cost of sales = TZS 40,000 – 8,000 = **TZS 32,000**

Example 4.11

Hodari has a business where she sells goods. She has provided the following information for the year ended 31st December, 2018.

Details	**TZS**
Opening inventory	39,360
Gross sales	512,000
Returns inwards	4,560
Discount allowed to cash customers	16,320
Returns outwards	5,120
Gross purchases	409,600

Required:

Determine the value of closing stock as at 31st December, 2018. Gross profit ratio is 25%.

Solution

There are two alternatives to determine the value of closing stock

Alternative 1

Workings

1. The value of gross profit

   Gross profit ratio = 25%. This is based on sales. This is therefore margin

$$\text{Margin} = \frac{\text{Gross profit}}{\text{Net sales}} \times 100$$

Net sales = Gross sales – Returns inwards = TZS 512,000 – 4,560 = **TZS 507,440**

$$25 = \frac{\text{Gross profit}}{507,440} \times 100$$

$$\frac{25}{100} = \frac{\text{Gross profit}}{507,440}$$

$$\frac{25}{100} \times 507,440 = \text{Gross profit}$$

Gross profit = **TZS 126,860**

Then, simply draw a statement of profit or loss and then find the missing figures as follows:

Income statement for the year ended 31st December, 2018

Details	**TZS**	**TZS**
Sales		512,000
Less: Return inwards		4,560
Net sales		507,440
Less: Cost of sales		
Opening stock	39,360	
Add: Purchases	409,600	
	448,960	
less: Return outwards	5,120	
Cost of goods available for sale	443,840	
Less: Closing stock	(A)	(B)
Gross profit		**126,860**

2. The value of 'B' = Cost of sales

   Net sales – Cost of sales = Gross profit

   507,440 – Cost of sales = 126,860

   Cost of sales = TZS 380,580

3. The value of 'A' = Closing stock

   Cost of goods available for sale – Closing stock = Cost of sales

   443,840 – Closing stock = 380,580

   Closing inventory = TZS 63,260

Alternative 2

Draw the statement of closing stock, from accounting relationship between closing stocks, cost of goods available for sale, cost of sale and sales.

Sales – Cost of sales = Gross profit

Making cost of sales the subject:

Cost of sales = Sales – Gross profit

But, cost of sales = Opening stock + Net purchases – Closing stock

And, opening stock + Net purchases = Cost of goods available for sale

So, cost of sales = Cost of goods available for sale – Closing (making closing stock the subject)

Making closing stock the subject:

Closing stock = Cost of goods available for sale – Cost of sales

Alternatively:

Closing stock = Cost of goods available for sale – (Sales – Gross profit)

So, the statement will be drawn from the above idea as:

Statement of computing stock as at 31st December, 2018

Details	**TZS**	**TZS**
Opening inventory		39,360
Add: Purchases		409,600
		448,960
Less: Returns outwards		5,120
Cost of goods available for sale		443,840
Less: Cost of sales		
Sales	512,000	
Less: Returns inwards	4,560	
Net sales	507,440	
Less: Gross profit (25% × 507,440)	126,860	(380,580)
Closing stock		**63,260**

In both alternatives, allowances to cash customers were ignored in computation of net sales. The discount was allowed to customers to induce them to pay promptly, hence no effect on gross profit.

Retail method

This method is used by businesses dealing with large amounts of stocks of relatively low unit price. All items are usually quoted at retail prices. Example of business using retail method is supermarket.

Steps in using the retail method are:

(a) Determine the cost of goods available for sale in retail price and cost price

(b) Calculate the cost to retail ratio, by dividing the cost of goods available for sale at retail price by the cost available at cost price.

$$\text{Cost to retail ratio} = \frac{\text{Cost of goods available for sale at cost price}}{\text{Cost of goods available for sale at retail price}} \times 100$$

(c) Calculate the value of closing inventory at retail price by deducting sales from the cost of goods available for sale at retail price.

(d) Closing inventory at retail price

= Cost of goods available for sale at retail price – Sales value

(e) Obtain the closing stock at cost by taking step (b) × step (c)

(f) Closing inventory = Cost to retail ratio × Closing stock at retail prices.

Example 4.12

The following information relates to the Mswahili business for the year ended 31st December, 2019.

Date	Details	Costs price (TZS)	Retail price (TZS)
1st January, 2019	Opening stock	261,000	417,600
30th June, 2019	Purchases	210,250	307,400
30th September, 2019	Sales	-	246,500

Required:

Estimate the value of closing stock by retail method

Solution

Follow the steps as presented above:

Step 1: Determine the cost of goods available for sale in retail price and cost price.

Details	Costs price (TZS)	Retail price (TZS)
Opening stock	261,000	417,600
Add: Purchases	210,250	307,400
Cost of goods available for sale	471,250	725,000

Step 2: Calculate the cost to retail ratio

$$\text{Cost to retail ratio} = \frac{\text{Cost of goods available for sale at cost price}}{\text{Cost of goods available for sale at retail price}} \times 100$$

$$= \frac{471{,}250}{725{,}000} \times 100 = 65\%$$

Step 3: Calculate the value of closing inventory at retail price

Inventory at retail price

= Cost of goods available for sale at retail price – Sales figure

Inventory at retail price = 725,000 – 246,500 = **TZS 478,500**

Step 4: Obtain the closing stock at cost by taking step (2) × step (3)

Closing stock = cost to retail ratio × closing stock at retail prices.

Values of closing stock = 65% × 478,500 = **TZS 311,025**

Exercise 4.6

1. Jembe's stock was destroyed by fire on 31st December 2020 except for a salvage that was valued at TZS 980,000. The figures below were extracted from the accounts locked in the fireproof room.

Details	**(TZS)**
Stock as at 1st January, 2020	42,000,000
Wages	89,600,000
Purchases	176,400,000
Sales	347,200,000

Required:

Estimate the value of closing inventory as at 31st December, 2020. Take a gross profit base of 25% of turnover.

2. Mdau made the following transaction during the quarter of July – September, 2021. Purchases total TZS 30,000,000 and net sales amounting to TZS 31,250,000. On 30th June, 2021, Mdau had inventory costing TZS 4,200,000. Gross profit margin is 20%.

Required:

Estimate the value of stock as at 30th September, 2021.

3. Reported data of Wadau stores for the year ended 31st December, 2022 are as follows:

Details	Costs price (TZS)	Retail price (TZS)
Opening stock	110,000	192,000
Purchases	1,660,000	2,792,000
Sales	-	2,560,000
Closing stock	190,000	-

Required:

Use retail price method to determine the accuracy of the reported cost of closing stock.

Stock valuation and insurance claim

Insurance is an agreement between the insured and insurer, where by the insurer in return for a premium agrees to compensate the insured in case of a loss. The amount insured and on which the insurance is paid is referred to as sum insured.

Over-insurance is the situation where the sum insured is higher than the actual value of item insured. Example, when the sum insured is higher than the value of stock that were present prior to the accident. When stocks are over insured, insurance claim equals to the actual value of stock destroyed i.e., actual loss.

Under insurance is the situation where the sum insured is lower than the actual value of item insured. Example when the sum insured is lower than the value of stock that were present prior to the accident. When stocks are under-insured, insurance claim will be determined based on an average clause. Average clause is a clause in an insurance policy that requires the insured to bear portion of the loss if the item was underinsured. Insurance claim if there is average clause will be calculated as follows:

$$\text{Insurance claim} = \frac{\text{Sum insured}}{\text{Stock value at the date of accident}} \times \text{Actual loss}$$

Loss of stock can be determined by using the following formula:

Amount of stock on the date of accident	xx
Less: Amount of salvaged stock	xx
Amount of stock loss	**xx**

If there is no average clause then insurance claim will be the lower of actual loss and sum insured.

Example 4.13

Juma prepares accounts on 30th September, each year. On 31st December, 2020 fire destroyed the greater part of his stock. The following information was collected from his books:

Details	TZS
Stock on 1st October, 2020	3,600,000
Purchases from 1st October – 31st December, 2020	8,500,000
Sales from 1st October – 31st December, 2020	11,800,000

The rate of gross profit is $33\frac{1}{3}\%$ on cost. Stock to the value of TZS 300,000 was salvaged. Insurance policy was for TZS 2,500,000 and claim was subject to average clause.

Additional information:

(a) Stock at the beginning was calculated at 10% less than cost.

(b) Purchases include the purchase of the plant for TZS 500,000

Required:

Calculate the claim for the loss of stock.

Solution

Step 1: Calculate the value of stock as at the date of accident

Statement of stock as at 31st December, 2020

Details	TZS	TZS
Opening inventory (W1)		4,000,000
Add: Purchases		8,500,000
Less: Purchases of plants (capital expenditure)		500,000
Cost of goods available for sale		12,000,000
Less: Cost of sales		
Sales	11,800,000	
Less: Gross profit (W2)	2,950,000	8,850,000
Closing stock		**3,150,000**

Step 2: Calculate the value of stock loss (amount of stock destroyed by fire)

Amount of stock on the date of accident	3,150,000
Less: Amount of salvage stock	300,000
Amount of stock loss	**2,850,000**

Step 3: Calculate the amount of insurance claim

Since the average clause is in use, then:

$$\text{Insurance claim} = \frac{\text{Sum insured}}{\text{Stock value at the date of accident}} \times \text{Actual loss}$$

$$= \frac{2{,}500{,}000}{3{,}150{,}000} \times 2{,}850{,}000 = \text{TZS}\,2{,}261{,}905$$

Insurance claim = TZS 2,261,905

Alternatively

Step 1 and step 2 can be combined to form a statement of insurance claim, and then workout the amount of insurance claim as follows:

Statement of insurance claim as at 31st December, 2020

Details	**TZS**	**TZS**
Opening inventory (W1)		4,000,000
Add: Purchases		8,500,000
Less: Purchases of plants (capital expenditure)		500,000
Cost of goods available for sale		12,000,000
Less: Cost of sales		
Sales	11,800,000	
Less: Gross profit (W2)	2,950,000	8,850,000
Closing stock		3,150,000
Less: Amount of salvage stock		300,000
Cost of goods destroyed by fire		**2,850,000**

$$\text{Amount of insurance claim} = \frac{2{,}500{,}000}{3{,}150{,}000} \times 2{,}850{,}000 = \text{TZS}\,2{,}261{,}905$$

Amount of insurance claim = **TZS 2,261,905**

Workings

W1: *Determine the cost value of stock:*

$$3{,}600{,}000 = 90\%$$
$$? = 100\%$$

$$\frac{3,600,000 \times 100}{90} = \text{TZS}\,4{,}000{,}000$$

W2: *Determining the amount of gross profit:*

Mark-up is given as 33.33%. This is the percentage of gross profit on cost. Changing it to margin:

$$\text{Changing mark-up to margin} = \frac{\text{Numerator}}{\text{Numerator} + \text{Denominator}} \times 100$$

$$= \frac{33\frac{1}{3}}{100 + 33\frac{1}{3}} \times 100 = \left[33\frac{1}{3} \div 133\frac{1}{3}\right] \times 100$$

$$= \left[\frac{100}{3} \div \frac{400}{3}\right] \times 100 = \left[\frac{100}{3} \times \frac{3}{400}\right] \times 100 = \frac{300}{1,200} \times 100 = 25\%$$

Goss profit = 25% × 11,800,000 = **TZS 2,950,000**

Example 4.14

The stock of Amina's store was destroyed by fire on 30th June, 2019. Salvage amount of stock was valued at TZS 920,000. On 1st June, 2019 balance of stock was valued at TZS 4,000,000, purchases during the month were TZS 80,000,000 and sales were TZS 100,000,000. The company sells goods at cost plus 25%.

Required:

(a) Calculate the cost of goods destroyed by fire on 30th June, 2019 (use statement of insurance claim); and

(b) Assuming that there is no average clause in the insurance policy; calculate the amount of insurance claim if:

- (i) Sum insured was TZS 3,000,000.
- (ii) Sum insured was TZS 4,000,000.

Solution

(a) Cost of goods destroyed by fire on 30th June, 2019

Statement of insurance claim as at 30th June, 2019

Details	**TZS**	**TZS**
Opening inventory		4,000,000
Add: Purchases		80,000,000
Cost of goods available for sale		84,000,000
Less: Cost of sales		
Sales	100,000,000	
Less: Gross profit (W1)	20,000,000	80,000,000
Closing stock		4,000,000
Less: Amount of salvage stock		920,000
Cost of goods destroyed by fire		**3,080,000**

Workings

W1: *Determining the amount of gross profit:*

Gross profit = 25% on cost. This is mark-up. Change it to margin

$$\text{Changing mark-up to margin} = \frac{\text{Numerator}}{\text{Numerator} + \text{Denominator}} \times 100$$

$$= \frac{25}{100 + 25} \times 100 = \frac{25}{125} \times 100 = \frac{1}{5} \times 100 = 20\,\%$$

Gross profit = 20%×TZS 100,000,000 = **TZS 20,000,000**

(b) Amount of insurance claim

Because there is no average clause, then, the insurance claim will be the lower of sum insured and actual loss.

(i) When the sum insured was TZS 3,000,000:

The lower between TZS 3,000,000 and TZS 3,080,000 is TZS 3,000,000.

Insurance claim is therefore TZS 3,000,000

(ii) When the sum insured was TZS 4,000,000:

The lower between TZS 4,000,000 and TZS 3,080,000 is TZS 3,080,000.

Insurance claim is therefore TZS 3,080,000

Exercise 4.7

1. On 20th October, 2018, the business premises of Amani Ltd. were affected by fire. The following information were obtained from the accounting records:

Details	**TZS**
Stock of goods at 10% lower than cost as at 31st March, 2018	432,000
Net purchases from 1st April – 20th October, 2018	560,000
Net sales from 1st April – 20th October, 2018	1,240,000

Additional information:

(a) Purchases up to 20th October, 2018 did not include TZS 80,000. This relate to invoices yet to be received from supplier, although, goods were received in the store on 19th October, 2018.

(b) Records show the gross profit rate of 25%.

(c) The value of goods salvaged from fire was TZS 62,000.

(d) Amani Ltd. insured their stock to the extent of TZS 200,000.

Required:

Compute the amount of insurance claim.

2. On 12th June, 2019 fire occurred at Nuru's shop. Most of the stocks were destroyed. The value of stock salvaged was TZS 448,000. Furthermore, an additional stock was salvaged in a damaged condition and its value was agreed at TZS 420,000. To help determine the amount of insurance claim, Nuru has made available the following additional information:

(a) His stock at the close of account on 31st December, 2018 was valued at TZS 3,340,000;

(b) His purchases from 1st January, 2019 to 12th June, 2019 amounted to TZS 4,480,000;

(c) Sales during the period to 12th June, 2019 amounted to TZS 6,160,000;

(d) On average he earns a gross profit of 30% of sales; and

(e) Has insured his stock for TZS 2,400,000.

Required:

Calculate the amount of insurance claim.

3. On 31st March, 2021 fire occurred in the store of Wababe Ltd. which deals with the buying and selling of buckets for home use. The company had taken an insurance policy of TZS 3,000,000 which was subject to the average clause.

The following information are available relating to the period from 1st January to 30th March, 2021.

(a) Stock as per statement of financial position as at 31st December, 2020 was TZS 4,780,000;
(b) Purchases (including purchase of equipment costing TZS 1,500,000) TZS 8,500,000;
(c) Sales (including sale proceeds from disposal machine TZS 2,500,000) TZS 13,750,000;
(d) The average rate of gross profit is 20% of sales; and
(e) The value of the salvaged goods was TZS 615,000.

Required:

Compute the amount of the claim to be lodged to the insurance company.

Stock group and valuation

Stock items can be grouped together under "groups" in the inventory section to reflect their classification based on some commonalities. Grouping of inventories will enable easy location, tracking and reporting of stock items in the statements. Therefore, it is recommended that, items of a particular brand/feature be grouped together so that it is easy to trace/extract all items of that brand/feature. For example, a retailer may group the products as beverages (water, soda, juice and the like), cereals (rice, maize, beans, peas, and the like), and soaps (liquid soaps, detergent soaps, medicated soaps, soap bars and the like).

Normally, stock should be valued at the lower of cost or Net Realisable Value (NRV). However, this is simple when a business does not deal with a variety of products. When a business sells many types of different products, then determining the cost and NRV becomes a problem, unless some products are categorised into stock groups. Two (2) basic methods are used to group and value stocks:

Category method: In this method the similar items (like soaps) are put together and then the value of stock is determined by comparing cost and NRV for each category.
Article method: In this method the lower of cost or NRV for each item is taken, and then this is summed up to get the total value of all group (articles).

Example 4.15

The following information relates to the stock of Shujaa as at 31st June, 2019

Articles	Different categories	Costs (TZS)	Net Realisable Value (TZS)
1.	A	2,500	2,000
2.	A	3,000	3,750
3.	A	7,500	10,000
4.	B	4,500	4,250
5.	B	3,750	3,250
6.	B	6,500	5,250
7.	C	10,250	13,500
8.	C	9,000	10,250
9.	C	10,500	7,750
TOTAL		**57,500**	**60,000**

Required:

Calculate the value of inventory to be incorporated in the financial statement using category method.

Solution

Category	Costs (TZS)	NRV (TZS)
A	2,500 + 3,000 + 7,500 = 13,000	2,000 + 3,750 + 10,000 = 15,750
B	4,500 + 3,750 + 6,500 = 14,750	4,250 + 3,250 + 5,250 = 12,750
C	10,250 + 9,000 + 10,500 = 29,750	13,500 + 10,250 + 7,750 = 31,500

The lower of cost and NRV is then:

Category A = TZS 13,000
Category B = TZS 12,750
Category C = TZS 29,750

The value of inventory = 13,000 + 12,750 + 29,750 = **TZS 55,500**

Example 4.16

Use the information provided in example 4.15, to calculate the value of inventory to be incorporated in the financial statement using article method.

Solution

Articles	Costs (TZS)	NRV (TZS)	Valuation (TZS)
1.	2,500	2,000	2,000
2.	3,000	3,750	3,000
3.	7,500	10,000	7,500
4.	4,500	4,250	4,250
5.	3,750	3,250	3,250
6.	6,500	5,250	5,250
7.	10,250	13,500	10,250
8.	9,000	10,250	9,000
9.	10,500	7,750	7,750
TOTAL	**57,500**	**60,000**	**52,250**

The value of inventory = **TZS 52,250**

It is not necessarily that the value of inventory under article method will always be low. The important thing is for the management to choose a method to be followed considering the nature of assets as well. It may be right to categorise certain assets into groups for valuation purpose, while it may not be right to other assets. For example, assets like chairs, tables, and cupboards may be correctly categorized as "furniture" and their value determined using category method. In other cases a firm may decide not to categorize the houses it owns, as "buildings" due to various reasons, instead decide to find the correct value for each of them using the article method. Once the valuation methods are decided, they should be applied consistently.

Exercise 4.8

1. Explain why is it important to categorise stocks into groups for valuation purpose?
2. A firm hold three types of items, X, Y and Z. For these items to be sold they need to be packed. The cost price, selling price and packaging costs are given below.

Items	Costs (TZS)	Selling price (TZS)	Packaging costs (TZS)
X	12,500	15,000	3,000
X	23,000	30,500	5,500
Y	17,500	19,000	1,500
Y	24,500	35,500	5,500
Z	13,750	18,000	2,000
Z	26,500	42,500	6,250
	117,750	160,500	23,750

Required: Compute the value of inventory held by the firm (use category method).

Chapter summary

1. Stock is the number of items/products left unsold at the end of a particular period. It also refers to items held to be used for production purpose, like raw materials; and items/products that are in a process of production (work in progress).
2. Stock valuation is the determination of the value of inventory on hand at a particular date. It involves establishment of the physical existence and ownership of the stock items, determination of unit cost of the items and calculation of provisions in reducing the stock cost to its net realisable cost where necessary.
3. The IAS 2 requires each item of stock be considered separately and its cost be established individually or using FIFO method, or the weighted average cost method.
4. Stock error occurs when the actual quantity of stock available differs from the quantity in records; thus misstates the amount of the cost of sales, closing inventory, and their resulting profit/loss figure. Stock errors occur mainly as a result of theft, unreported product damage, human error, misplacement of stock items and mismanagement of stock returns.
5. Stocks are largely subjected to risk of loss due to fire, and therefore, it is advised to insure stocks so as to minimize the loss when fire occurs.

6. Stock items can be grouped together under categories in the inventory section to reflect their classification based on some commonalities. Grouping of inventories will enable easy location, tracking and reporting of stock items in the statements. Valuation of stock in groups can be carried out using category method or article method.
7. Normally, stock should be valued at the lower of cost or net realisable value. However, when a business sells many types of different products, it becomes difficult to determine the cost, or the net realisable value for each item, as a result, some products should be categorised into stock groups.

Revision exercise

1. Use the information provided in exercise 4.8, to compute the value of inventory held by the firm using article method.
2. The records extracted from Lelo Traders books of accounts, revealed the following information:

1st January, 2021	Purchased raw material 250 units for TZS 2,500,000
2nd January, 2021	Purchased raw material 100 units for TZS 1,200,000
3rd January, 2021	Issued 300 units for production
15th October, 2021	Purchased raw material 150 units for TZS 2,250,000
30th October, 2021	Purchased raw material 100 units for TZS 1,250,000
1st November, 2021	Issued raw material 125 units

Required:

Calculate the quantity and value of inventory on 31st December, 2021 using:
(a) FIFO; and
(b) Weighted average method.

3. Bobo valued its closing inventory on 31st December, 2016 at TZS 25,000,000. The profit disclosed during 2016 was TZS 40,000,000. After some time, it was found that the correct value of inventory was TZS 22,500,0000. Choose the correct answer from the list below to identify the effect of the above error in the reported profit:
(a) The error understated profit by TZS 2,500,000.
(b) The error overstated profit by TZS 25,000,000.
(c) The error overstated profit by TZS 2,500,000.
(d) The error understated profit by TZS 25,000,000

4. The following information relate to the data for an item stocked by Jamhuri Traders:

Date	Details	Units	Unit cost (TZS)	Total cost (TZS)
1st September, 2019	Opening inventory	300	10,000	3,000,000
8th September, 2019	Purchases	150	10,100	1,515,000
13th September, 2019	Sales	200	-	-
21st September, 2019	Sales	350	-	-
22nd September, 2019	Purchases	400	12,000	4,800,000
30th September, 2019	Sales	450	-	-

Required:

(a) Compute the cost of sales during September 2019 and the closing stock as at 30th September, 2019 using the perpetual stock system and FIFO method; and

(b) Compute the cost of sales during September 2019 and the closing stock as at 30th September, 2019 using the perpetual stock system and moving averages.

5. Given the following information of Wakuja Company for the year ended 30th June, 2021

Dates	Details	Costs price (TZS)	Retail price (TZS)
1st July, 2020	Opening stock	270,000	432,000
30th January, 2021	Purchases	217,500	318,000
30th April, 2021	Sales	-	255,000

Required: Calculate the value of closing stock using:

(a) Weighted average cost basis

(b) FIFO

6. Two brothers Nicolaus and Edward started a business of importing perfumes from Dubai and sell them in Arusha. They made the following transaction during the first seven weeks of their business:

Week	Transactions
1	Bought package A, 200 boxes @ TZS 60,000 each
2	Sold 100 boxes @ TZS 112,500 each
3	Bough package B, 250 boxes @ TZS 90,000 each
4	Sold 100 boxes @ TZS 120,000 each
5	Bought package C, 350 boxes @ TZS 105,000 each
6	Sold 150 boxes @ TZS 90 each and 100 boxes @ TZS 127,500 each
7	Sold 180 boxes @ TZS 142,500 each

The entire project was financed by a bank loan. Interest, advertising and other expenses totalled TZS 1,000,000. Loss of TZS 70,000 was discovered. It was also discovered by a consultant that Nicolaus has used FIFO method for valuing unsold stock whereas Edward has used weighted average cost method for the same purpose.

Required:

Prepare separate statements of profit or loss for the two brothers clearly show your computation of closing stock in each case.

7. LUKA Vision is a business dealing with ladies' outfits. On 1st June, 2017 the entire stock of LUKA Vision was destroyed by fire. Given below is the statement of profit or loss for the year ended 31st December, 2016:

Statement of profit or loss for the year ended 31st December, 2016

Details	**TZS**	**TZS**
Net sales		595,500
Less: Cost of sales		
Opening inventory	183,750	
Add: Purchases	472,500	
Cost of goods available for sale	656,250	
Less: Closing stock	210,000	446,250
Gross profit		**149,250**

The following information were also available:

(a) The figure of sales doesn't include sales of TZS 19,500 made on 31st December, 2016 which was recorded in the following day by mistake.

(b) TZS 15,000 cost of sales on 31st December, 2016 was included in the closing inventory by error.

(c) Records of salvage stock from fire revealed that trade transactions from 31st December, 2016 to the day the fire occurred were; Net sales TZS 272,250 including TZS 19,500 for sales of 31st December, 2016 that were recorded in the sales figure of 1st January, 2017. Net purchases were TZS 162,000.

Required: Compute the amount of insurance compensation using gross profit method.

8. Sila Corporation insured its stock for TZS 1,050,000. The company's store caught fire on 10th June 2016 and most of the stock and accounting records were destroyed. After thorough investigation, the following information were obtained.

Details	**TZS**
Stock on 31st March, 2015 (last year)	1,550,000
Debtors on 31st March, 2105	1,150,000
Creditors on 31st March, 2015	1,350,000
Receipt from debtors (1st April – 10th June)	1,425,000
Discount allowed to debtors	25,000
Payment to creditors	1,280,000
Discount received from creditors	45,000
Stock donated to a charity (cost value)	85,000
Stock salvaged from fire	150,000
Goss profit margin	25% on cost

Required:

(a) Compute the cost value of stock in inventory on 10th June, 2016 assuming that on that day, debtors amounted to 1,625,000 and creditors TZS 1,225,000; and

(b) The amount to be claimed from insurance company.

9. Fire occurred at the store of Chausiku on 28th November, 2019 and most of the stock was destroyed. The value of stock salvaged was TZS 1,804,000. The accounting books disclosed that, on 1st April, 2019 the opening stock was valued at TZS 14,707,000; the purchases to the date of fire amounted to TZS

40,700,000; and the sales amounted to TZS 62,040,000. Goods costing TZS 110,000 were taken for personal use by Chausiku; and goods sold for TZS 550,000 were returned in by the customer due to wrong size. On investigation, it was found that during the past three years the average gross profit on cost used to be 25%.

Required:

Prepare a statement showing the amount Chausiku should claim from the insurance company in respect of stock destroyed by fire.

10. The godown of Mwisho Ltd. caught fire on 20th March, 2019. In order to make a claim as per fire policy in respect of stock, your advice were sought and the following information was given to assist you:

	2016	**2017**	**2018**	**2019**
Details	**TZS**	**TZS**	**TZS**	**TZS**
Opening stock	167,200	250,800	334,400	167,200
Net purchases	792,000	946,000	1,012,000	330,000
Net sales	1,232,000	1,540,000	1,760,000	572,000
Expenses	330,000	420,200	308,000	99,000
Closing stock	250,800	334,400	167,200	-

The stock salvaged was TZS 33,880. The practice of the firm is to value stock at 5% less of cost.

Required:

Determine the amount of claim to be recovered from the insurance company.

Chapter Five

Accounting for royalties

Introduction

The production of some goods and/or services requires acquisition of rights to use some resources or assets or works from other entities. Examples of such resources or works are books artist's work, database, software and mines. Thus, a business entity that requires to use such assets or rights for its production has to make legal agreement with the owner and be ready to pay regular payments for the "rights" known as royalty or rent based on the quantity of goods produced or sold. The owner of the asset is referred to as the lessor, while the user is the lessee. In this chapter you will learn about the meaning and nature of royalties; meaning of minimum rent and short workings; accounting entries in the books of the lessor; and accounting entries in the books of the lessee. The competences developed will enable you to record various transactions related to royalties in the books of accounts and prepare the financial statements.

Concept of royalties

Royalty is a payment made by a person (lessee) for the right to use an asset belonging to another person (lessor). It is a legally binding payment made to a person or to a firm for the ongoing use of their assets. Royalty is a very common payment for businesses like mining, (for rights to extract minerals); publishers (for rights to publish and/or sell books); and manufacturers (for patent right to manufacture a patented product). A payment received by a musician when his/her songs are played on a radio or television station, applied in movies, performed at concerts by other people, or consumed through streaming services is another example of royalty. Another example is the payment made by the oil and gas extractors to landowners for permission to extract natural resources from the landowners' covered property. There must be a contractual royalty agreement between the licensor and licensee before the latter can start using the property. Royalty payment can be a fixed fee or a percentage of the gross or net revenue obtained by the lessee on using the licenced property.

The royalty agreement

A royalty agreement is a legal contract between a lessor and a lessee. The agreement grants the right to the licensee to use the lessor's licensed property in exchange for agreed royalty payments. This contract will indicate the royalty terms and amount of the payment to be made, by the lessee to the owner of the property. The agreement will also state the parties involved, the rights granted, and the period of use of the licensed property.

Types of royalties

Royalty payments may cover many different types of property. Some of the more common types of royalties are as follows:

Patent royalties: Usually innovators or creators patent their products. Patent royalties are paid to people or firms that have innovated or created certain products. Then, if a third party wants to use such product of patent, must enter into a contractual agreement that will require the payment of royalties to the patent owner. In this way, royalty acts as a compensation to the innovator for the intellectual property.

Mineral royalties: These are royalties paid by mineral extractors to land owners. The party that wants to extract the minerals will often pay the property owner an amount based on either revenue or units, such as barrels of oil or tons of coal.

Copyright royalties: A copyright is the ownership granted to the creator of work of art when that work is created. This ownership grants the artist sole ability to use the work and whoever else wants to reprint, copy, display, or otherwise use such copyright protected work must be authorized by the creator.

Copyright royalties are royalties paid to the owner of the copyright by another person or firm for the right to use the copyrighted material. Typical examples of copyright royalties include royalties paid by publishers to book authors (book royalties) and royalties paid to the owner of copyrighted music whenever the music or song is played by a radio station, or used in a movie, or otherwise used by a third party (performance).

Franchise royalties: A franchise is a license given by a business owner to a third party with a view of providing its brand, operational model and required support to use and run a similar business for a fee and/or some share of the income generated. Franchise aims at expanding the business and be able to distribute goods and services to areas where the original owner is unable to reach. The original owner is known as the franchisor, while the user is the franchisee.

The franchise royalty is an ongoing fee paid by the franchisee to the franchisor after entering into a franchise contract. Majority of franchise companies operating in Tanzania currently, are food and drinks chains like Coca cola Kwanza Ltd. that franchised its operation to Mbeya and Zanzibar, others are KFC and Pizza Hut.

Difference between royalty and rent

Royalty and rent are usually used interchangeably, although there is some difference between the two. The following are the major difference between royalty and rent:

SN	Royalty	Rent
1	It is paid for the use of special right for both tangible and intangible assets.	It is paid for the use of tangible assets only.
2	Royalty is paid either based on units produced or quantity sold.	Rent is paid based on period on the agreement.
3	Royalty fee varies with the change in units produced or quantity sold.	Rent is fixed over the period agreed.
4	Lessee must pay minimum rent and might be allowed to recoup short workings in year of favourable production or sale.	The concept of minimum rent is not applicable and hence there is no recoupment.

Minimum rent and short workings

Minimum rent

Under the royalty contract, the lessee agrees to make payment of royalty to the lessor based on the number of goods produced or the quantity of goods sold. In some cases, the number of goods produced or sold may be very low or completely nothing. Under such circumstances, if the royalty fee is a percentage on income or revenue generated, the lessor may have very little or no royalty to receive, despite the fact that the lessee has used the lessor's asset. In order to avoid losses on the side of the lessor, usually, the royalty agreements contain a clause for the payment of a fixed minimum amount to the lessor every period as royalty, regardless of the actual benefit to be taken by the lessee. This is done to assure the lessor receives certain regular income from his property regardless of the production/sales level. This minimum amount is referred to as "minimum rent", also known as "dead rent" or "flat rent".

Minimum rent is therefore a minimum sum guaranteed to the lessor by the lessee in order to make the lessor receive a minimum amount in any particular period, whether the lessee derives any benefit from the lessor's property or not.

The minimum rent is normally fixed at the time when the lessor enters into an agreement with the lessee. At the end of the period, the lessee will be required to pay the minimum rent or the actual royalty amount, whichever is higher.

Example 5.1

Kwetu Traders leased a machine for sunflower oil refining, from Ukuta Company. The agreed minimum rent is TZS 36,000,000 per annum, merging a royalty of TZS 1,000 per refined litre of sunflower oil. In the first year, Kwetu Traders refined 48,000 litres, and in the second year 32,000 litres are refined.

Required

State the amount to be paid as royalty in the first and second years.

Solution:

Analysis table

Year	Quantity in litre	Rate per litre	Actual royalty	Minimum rent	Royalty paid
Year 1	48,000	1,000	48,000,000	36,000,000	48,000,000
Year 2	32,000	1,000	32,000,000	36,000,000	36,000,000

Therefore, the Kwetu Traders will pay TZS 48,000,000 at the end of the first year and TZS 36,000,000 at the end of the second year.

The concept of short workings

Short working is that amount by which the minimum rent exceeds actual royalty. In some periods, the actual royalty may be higher or lower than the minimum rent. Short working occurs when the lessee is required to pay more (minimum rent) for the royalty than what is actually earned. For example, an author of a book enters into a contract with the publisher to sell his books on copyrights agreement. The contract binds the publisher to pay a royalty fee of TZS 8,000 per book sold or TZS 6,000,000 as minimum rent. During the year 2021, the publisher sold 680 copies of books at TZS 10,000 each, making the total revenue of TZS 6,800,000. In this case actual rolalty is 5,440,000 being (680x8000), while minimum rent is TZS 6,000,000. Therefore, the lessee will pay the minimum rent, short workings being equal to TZS 560,000 *(TZS 6,000,000* – 5,440,000*)*.

However, certain contracts do not provide for minimum rent. In this case, actual royalties are paid and therefore the issue of short working does not arise.

Surplus

When the actual rent is higher than the minimum rent, the difference is called surplus. Consider the previous example under short workings, and assume that the lessee managed to sell 1,000 copies of the book. In this case the total revenue is TZS 10,000,000, paying TZS 8,000,000 as royalty. The surplus payment over minimum rent is therefore TZS 2,000,000.

In example 5.1, short workings would appear in the second year, and this would be TZS 4,000,000, while in year 1 there was a surplus of TZS 12,000,000. See the table below:

Analysis table

Year	Quantity in litre	Rate per litre	Actual royalty	Minimum rent	Royalty paid	Short working
1	48,000	1,000	48,000,000	36,000,000	48,000,000	-
2	32,000	1,000	32,000,000	36,000,000	36,000,000	4,000,000

Recoupment of short workings

Usually, a royalty agreement provides a provision for carrying forward the short workings with a view to make adjustments in future surplus. If the lessee has paid for short workings during the previous period, the royalty agreement may give the lessee the right to recover such short workings in the subsequent favourable years. This process is known as recoupment and that right is called right to recoupment. Usually in a contract where there is provision of minimum rent, there is also a provision of recoupment of short workings. The lessee can accumulate the short workings for a period of time until the stage of surplus is reached, where he can start recovering the excess over minimum rent. Short workings can only be recouped from the transactions relating to future royalty payments only, not backward. Depending on the terms of the royalty contract, the lessee can start paying for the actual royalty after full or partial recovery of short workings.

Rights of recoupment

Right to recoupment in any royalty agreement can either be fixed right or floating right: -

Fixed right: Here the lessee has the right to recoup short workings for a fixed time period. In this case the lessor agrees to compensate the lessee for the losses incurred in the previous years, by allowing him to recover the difference between actual royalty and minimum rent for a fixed number of years. For example, the lessor may agree to compensate the lessee for the short workings only during the first five years, after which any balance of short workings not recouped will be transferred to the income statement as an expense to the lessee and an income to the lessor.

Floating right: In this case, the lessee has a right to recover the short workings of any year during the next agreed number of years, following the payment of short workings. This means the short workings of each year if not recovered, will be carried forward not further than the next agreed number of years. For example, if the recoverable agreed period is two years, short workings of the first year can be recouped in the second and/or third year. Similarly, short workings of the fifth year, can be recouped during the sixth year and/or seventh year. If it is not possible to recoup the short workings during the agreed period, the short workings not recouped will be transferred to income statement as an expense to the lessee and an income to the lessor.

Example: 5.2

Consider the following table that shows the actual royalty, minimum rent, royalty paid and short workings. The lessee had the right to recoup short workings during the first three (3) years.

Year	Actual royalty	Minimum rent	Royalty paid	Short workings	Short workings recouped
2019	2,400,000	4,000,000	4,000,000	1,600,000	-
2020	3,600,000	4,000,000	4,000,000	400,000	-
2021	4,800,000	4,000,000	4,000,000	-	800,000

The above table shows that in the years where actual royalty was less than the minimum rent, the royalty paid was equal to the minimum rent and the difference being recognized as short workings. The lessee recouped short workings amounted to TZS 800,000 in the third year, and therefore, the remaining TZS 1,200,000 will be transferred to the income statement of the lessee as expenses, while the same will be treated as income in the income statement of the lessor.

Example 5.3

MKWAKWANI Drilling Group (MDG) Ltd. granted a mining lease to Pangani Ltd., on the basis that Pangani Ltd pays a royalty of TZS 30,000 per ton of ore mined subject to a minimum rent of TZS 10,000,000 per year. The output in five years was as follows:

Year	2014	2015	2016	2017	2018
Output (Tons)	200	300	400	300	350

Required:

Compute royalty, short workings, recoupment, transfers to income statement and amount receivable from lessee under the following cases:

(a) Pangani Ltd. has the right to recoup the short workings within the first four years of the lease contract and not afterwards.

(b) Pangani Ltd. has the right to recoup the short workings within three years following the payment of the respective short workings and not afterwards.

Solution

Case (a): When the lessee has the right to recoup the short workings within the first four years of the lease contract and not afterwards.

Year	Qnty in tons	Rate per ton	Actual royalty	Minimum rent	Short workings (Recoupment)	Short workings	Transferred to income statement	Royalty paid
2014	200	30,000	6,000,000	10,000,000	4,000,000	4,000,000	-	10,000,000
2015	300	30,000	9,000,000	10,000,000	1,000,000	5,000,000	-	10,000,000
2016	400	30,000	12,000,000	10,000,000	(2,000,000)	3,000,000	-	10,000,000
2017	300	30,000	9,000,000	10,000,000	1,000,000	4,000,000	4,000,000	10,000,000
2018	350	30,000	10,500,000	10,000,000	500,000	-	-	10,500,000

Case (b): When the lessee has the right to recoup the short workings within three years following the payment of the respective short workings and not afterwards.

Year	Qnty in tons	Rate per ton	Actual royalty	Minimum rent	Short workings (Recoupment)	Short workings	Transferred to income statement	Royalty paid
2014	200	30,000	6,000,000	10,000,000	4,000,000	4,000,000	-	10,000,000
2015	300	30,000	9,000,000	10,000,000	1,000,000	5,000,000	-	10,000,000
2016	400	30,000	12,000,000	10,000,000	(2,000,000)	3,000,000	-	10,000,000
2017	300	30,000	9,000,000	10,000,000	1,000,000	2,000,000	2,000,000	10,000,000
2018	350	30,000	10,500,000	10,000,000	(500,000)	1,000,000	500,000	10,000,000

Exercise 5.1

1. The following information relate to a lease agreement between Naseeb (lessee) and Kibwana (landlord). The lease agreement gives the lessee right to recoup short workings within the first five (5) years.

Year	Actual royalty (TZS)	Minimum rent (TZS)
2015	1,200,000	2,000,000
2016	1,800,000	2,000,000
2017	2,400,000	2,000,000
2018	3,600,000	2,000,000
2019	3,900,000	2,000,000
2020	4,500,000	2,000,000

Required:

In each year, compute royalty paid, short workings and short workings recouped.

2. The Bagamoyo Ltd. granted a lease to Pwani Fishiries Ltd. to fish in the Bagamoyo Coast on the basis of TZS 1,000,000 per ton of fish subject to a minimum rent of TZS 750,000,000. The output in five years was as follows:

Year	2014	2015	2016	2017	2018
Output of fish (tons)	500	750	1,000	750	875

Required:

Compute royalty, short workings, recoupment, transfers to income statement and amount receivable from lessee under the following cases:

(a) The lessee has the right to recoup the short workings during the first two years of the lease and not afterwards.

(b) The lessee has the right to recoup the short workings within two years following the payment of the respective short workings and not afterwards.

Accounting entries in the books of the lessor

The following accounts are to be maintained in the books of the lessor:

Royalty income account: This account is used to record the amount of royalties earned in any period by the company from lessee who uses lessor's assets under royalty agreements. This account is created by the owner of the asset. It is an income account.

Lessee account: This account is used to record royalty receivable, amount received from lessee and short workings. It is an asset account.

Short workings allowable account: This account is used to record the excess amount of minimum rent over the actual royalties allowable to lessee.

Accounting entries

The following are the accounting entries of royalty transactions in the books of lessor:

SN	Narrations	Details
1.	When production is made or royalty is due	Dr. Lessee account xx Cr. Royalty income account xx (With the actual royalties based on the number of units produced)
2.	When there are short workings (actual royalty is less than the agreed minimum rent)	Dr. Lessee account xx Cr. Short workings allowable account xx (With the excess of minimum rent over actual royalty)
3.	When payment is received	Dr. Bank account xx Cr. Lessee account xx (With the amount received)
4.	When short working is recouped	Dr. Short workings allowable account xx Cr. Lessee account xx (With the amount recouped)
5.	When transferring royalty income to income statement	Dr. Royalty income account xx Cr. Income statement xx (With the balance of the royalty receivable account)
6.	When transferring irrecoverable amount of short working to income statement	Dr. Short working allowable account xx Cr. Income statement xx (With any outstanding short working whose recoupment period is expired)

Note:

(a) Any balance in the short workings allowable account is treated as a current liability by the lessor.

(b) When the royalty agreement does not contain a clause for minimum rent, the question of short workings and its recoupment does not arise, and hence, such accounts will not exist.

(c) The lessor is always entitled to get either the minimum rent or the actual royalty whichever is higher subject to any adjustment for short workings recouped.

Example 5.4

On 1st January, 2018, Mrefu Ltd. took a lease of a coal field from Mdogo Ltd. at a royalty of TZS 100,000 per ton of coal raised. The royalties were receivable annually. The following table presents the quantity of coal raised during the first four years:

Year	2018	2019	2020	2021
Output (tons)	300	500	550	600

Required:

Prepare the following accounts in the books of lessor:

(a) Lessee account

(b) Royalty receivable account

Solution

Analysis table

Year	Quantity in tones	Rate per tone	Royalty
2018	300	100,000	30,000,000
2019	500	100,000	50,000,000
2020	550	100,000	55,000,000
2021	600	100,000	60,000,000

Dr. **Mrefu account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2018	Royalty income	30,000,000	31st Dec., 2018	Bank	30,000,000
31st Dec., 2019	Royalty income	50,000,000	31st Dec., 2019	Bank	50,000,000
31st Dec., 2020	Royalty income	55,000,000	31st Dec., 2020	Bank	55,000,000
31st Dec., 2021	Royalty income	60,000,000	31st Dec., 2021	Bank	60,000,000

Dr. **Royalty income account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2018	Income statement	30,000,000	31st Dec., 2018	Mrefu	30,000,000
31st Dec., 2019	Income statement	50,000,000	31st Dec., 2019	Mrefu	50,000,000
31st Dec., 2020	Income statement	55,000,000	31st Dec., 2020	Mrefu	55,000,000
31st Dec., 2021	Income statement	60,000,000	31st Dec., 2021	Mrefu	60,000,000

Example 5.5

SOIL Ltd. leased a quarry to CHEMBA Ltd. to extract stones under the following terms:

(a) A royalty rent of TZS 2,000 per cubic meter extracted was payable;

(b) CHEMBA Ltd. had the right to recoup short workings within the first four (4) years of the lease agreement; and

(c) A minimum rent of TZS 15,000,000 per annum was payable.

The quantity of extracted stones for the period of six years is as follows:

Year	2015	2016	2017	2018	2019	2020
Quantities (Cubic meter of stones)	6,250	6,875	7,200	8,500	10,250	11,000

Required: Prepare ledger accounts in the books of SOIL Ltd.

Solution

Analysis table

Year	Output (Quantity)	Actual royalty	Minimum rent	Short workings	Recoupments	Irrecoverable short workings	Royalty paid
2015	6,250	12,500,000	15,000,000	2,500,000	-	-	15,000,000
2016	6,875	13,750,000	15,000,000	1,250,000	-	-	15,00,000
2017	7,200	14,400,000	15,000,000	600,000	-	-	15,00,000
2018	8,500	17,000,000	15,000,000	-	2,000,000	2,350,000	15,00,000
2019	10,250	20,500,000	15,000,000	-	-	-	20,500,000
2020	11,000	22,000,000	15,000,000	-	-	-	22,000,000

Note:

(a) The excess of royalties rent over minimum rent in the year 2018 is used to recoup part of short workings accumulated for 3 years.

(b) Total accumulated short workings in the first 3 years are:
TZS 4,350,000 [2,500,000 + 1,250,000 + 600,000].

(c) unrecouped amount is equal to accumulated short workings in the previous years less recouped amount. [4,350,000 – 2,000,000 = 2,350,000]. Therefore, TZS 2,350,000 has not been recouped by the end of the 4th year [period for which recoupment is allowed]. This amount will be transferred to the income statement of the lessee as expense, and of the lessor as income.

Dr. **Royalty income account** Cr.

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Income statement	**12,500,000**	31st Dec., 2015	CHEMBA Ltd.	**12,500,000**
31st Dec., 2016	Income statement	**13,750,000**	31st Dec., 2016	CHEMBA Ltd.	**13,750,000**
31st Dec., 2017	Income statement	**14,400,000**	31st Dec., 2017	CHEMBA Ltd.	**14,400,000**
31st Dec., 2018	Income statement	**17,000,000**	31st Dec., 2018	CHEMBA Ltd.	**17,000,000**
31st Dec., 2019	Income statement	**20,500,000**	31st Dec., 2019	CHEMBA Ltd.	**20,500,000**
31st Dec., 2020	Income statement	**22,000,000**	31st Dec., 2020	CHEMBA Ltd.	**22,000,000**

Dr. **CHEMBA Ltd. account** Cr.

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Royalty income	12,500,000	31st Dec., 2015	Bank	15,000,000
31st Dec., 2015	Short workings allowable	2,500,000			
		15,000,000			**15,000,000**
31st Dec., 2016	Royalty income	13,750,000	31st Dec., 2016	Bank	15,000,000
31st Dec., 2016	Short workings allowable	1,250,000			
		15,000,000			**15,000,000**
31st Dec., 2017	Royalty income	14,400,000	31st Dec., 2017	Bank	15,000,000
31st Dec., 2017	Short workings allowable	600,000			
		15,000,000			**15,000,000**
31st Dec., 2018	Royalty income	17,000,000	31st Dec., 2018	Short workings allowable	2,000,000
			31st Dec., 2018	Bank	15,000,000
		17,000,000			**17,000,000**
31st Dec., 2019	Royalty income	**20,500,000**	31st Dec., 2019	Bank	**20,500,000**
31st Dec., 2020	Royalty income	**22,000,000**	31st Dec., 2020	Bank	**22,000,000**

Dr. **Short workings allowable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Balance c/d	**2,500,000**	31st Dec., 2015	CHEMBA Ltd.	**2,500,000**
31st Dec., 2016	Balance c/d	3,750,000	1st Dec., 2016	Balance b/d	2,500,000
			31st Dec. 2016	CHEMBA Ltd.	1,250,000
		3,750,000			**3,750,000**
31st Dec., 2017	Balance c/d	4,350,000	1st Dec., 2017	Balance b/d	3,750,000
			31st Dec., 2017	CHEMBA Ltd.	600,000
		4,350,000			**4,350,000**
31st Dec., 2018	CHEMBA Ltd.	2,000,000	1st Dec., 2018	Balance b/d	4,350,000
31st Dec., 2018	Income statement	2,350,000			
		4,350,000			**4,350,000**

Example 5.6

NGAO Ltd. granted a lease for mining activities to NJOMBE Miners Ltd. based on TZS 2,000 per ton of minerals extracted subject to a minimum rent of TZS 11,000,000 per year. The lessee has the right to recoup the short workings within two years following the payment for the respective short workings and not afterwards. The output in five years was as follows:

Year	2015	2016	2017	2018	2019
Output (tones)	4,000	4,500	6,000	6,800	5,500

Required:

Prepare ledger accounts as they would appear in the books of NGAO Ltd.

Solution

Analysis table

Year	Qnty in tons	Rate per ton	Actual royalty	Minimum rent	Short working (Recoupment)	Short workings	Transferred to income statement	Royalty paid
2015	4,000	2,000	8,000,000	11,000,000	3,000,000	3,000,000	-	11,000,000
2016	4,500	2,000	9,000,000	11,000,000	2,000,000	5,000,000	-	11,000,000
2017	6,000	2,000	12,000,000	11,000,000	(2,000,000)	1,000,000	2,000,000	11,000,000
2018	6,800	2,000	13,600,000	11,000,000	(2,000,000)	-	-	11,600,000
2019	5,500	2,000	11,000,000	11,000,000	-	-	-	11,000,000

Dr. **NJOMBE Miners Ltd. account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Royalty income	8,000,000	31st Dec., 2015	Bank	11,000,000
31st Dec., 2015	Short workings allowable	3,000,000			
		11,000,000			**11,000,000**
31st Dec., 2016	Royalty income	9,000,000	31st Dec., 2016	Bank	11,000,000
31st Dec., 2016	Short workings allowable	2,000,000			
		11,000,000			**11,000,000**
31st Dec., 2017	Royalty income	12,000,000	31st Dec., 2017	Bank	11,000,000
			31st Dec., 2017	Short workings allowable	1,000,000
		12,000,000			**12,000,000**

31st Dec., 2018	Royalty income	13,600,000	31st Dec., 2018	Bank	11,600,000
			31st Dec., 2018	Short workings allowable	2,000,000
		13,600,000			**13,600,000**
31st Dec., 2019	Royalty income	11,000,000	31st Dec., 2019	Bank	11,000,000

Dr. **Royalty income account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Income statement	**8,000,000**	31st Dec., 2015	NJOMBE Miners Ltd.	**8,000,000**
31st Dec., 2016	Income statement	**9,000,000**	31st Dec., 2016	NJOMBE Miners Ltd.	**9,000,000**
31st Dec., 2017	Income statement	**12,000,000**	31st Dec., 2017	NJOMBE Miners Ltd.	**12,000,000**
31st Dec., 2018	Income statement	**13,600,000**	31st Dec., 2018	NJOMBE Miners Ltd.	**13,600,000**
31st Dec., 2019	Income statement	**11,000,000**	31st Dec., 2019	NJOMBE Miners Ltd.	**11,000,000**

Dr. **Short workings allowable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Balance c/d	**3,000,000**	31st Dec., 2015	NJOMBE Miners Ltd.	**3,000,000**
31st Dec., 2016	Balance c/d	5,000,000	1st Dec., 2016	Balance b/d	3,000,000
			31st Dec., 2016	NJOMBE Miners Ltd.	2,000,000
		5,000,000			**5,000,000**
31st Dec., 2017	NJOMBE Miners Ltd.	2,000,000	1st Dec., 2017	Balance b/d	5,000,000
	Income statement	1,000,000			
	Balance c/d	2,000,000			
		5,000,000			**5,000,000**
31st Dec., 2018	NJOMBE Miners Ltd.	2,000,000	1st Dec., 2018	Balance b/d	2,000,000

Exercise: 5.2

1. PASUA Company leased a land for extraction of minerals from LOLIONDO Company Ltd. on royalty terms for TZS 50,000 per kg, in which no minimum rent is required. The lease provided that the actual royalty for the year should be paid. The trading results for the eight (8) years, from 2011 to 2018 are provided below:

Years	2011	2012	2013	2014	2015	2016	2017	2018
Production (kg)	-	90	250	350	420	550	280	450

Required:

Prepare ledger entries in the books of PASUA Company.

2. NUNDU Ltd. acquired rights to extract minerals from the mine belonging to GAMA Ltd. on the following terms:
   (a) Royalty shall be paid TZS 40,000 per kg.
   (b) Minimum royalty shall be TZS 50,000,000 per month.
   (c) Short workings should be recouped within the first two months.
   (d) Settlement will be made on monthly basis.

Agreement came into effect on 1st May, 2019 and the following quantities of minerals were extracted by NUNDU Ltd. during the first five months:

Month	May	June	July	August	September
Output (Kgs)	900	1300	1700	2500	3000

Required:

Prepare journal entries to record the above entries in the books of NUNDU Ltd.

3. On 1st January, 2010, MOTISHA Ltd. acquired rights from DASIA Ltd. for the production of TAMU, a soft drink brand developed and owned by DASIA Ltd. It was agreed that royalty would be TZS 40 per bottle produced. The minimum rent shall be TZS 15,000,000 and short workings would be recouped within the two years following the payment of short workings.

The following table presents the number of units produced for a period of five years:

Year	2010	2011	2013	2014	2015
Output (units)	250,000	300,000	400,000	250,000	500,000

Required:

Prepare ledger accounts in the books of MOTISHA Ltd. for a period of five years ending 31st December, 2015.

Accounting entries in the books of lessee

The lessee shall maintain the following accounts with the lessor:

Royalty account: This account records periodical payments made by the user of asset to owner based on output. It is a nominal account (expense account).

Lessor account: This account is used to record royalty payable amount paid to the lessor and short workings.

Short workings recoverable account: This account is used to record the excess amount of minimum rent over the actual royalties and any amount recovered thereof.

Accounting entries

The following are the accounting entries of royalty transactions in the books of lessee:

SN	Narrations	Details
When royalty is less than minimum rent and the minimum rent account is not maintained:		
1.	When production is made or royalty is payable	Dr. Royalty expense account xx Dr. Short workings recoverable account xx Cr. Lessor account xx (With the minimum rent payable to the lessor)
2.	When payment is made	Dr. Lessor account xx Cr. Bank account xx (With the amount paid)
3.	Closing the royalty account	Dr. Income statement/Manufacturing account xx Cr. Royalty payable account xx (With the balance of the royalty payable account)
When the Royalty is less than minimum rent and the minimum rent account is maintained:		
1.	When production is made or royalty is payable	Dr. Royalty expense account xx Dr. Short workings recoverable account xx Cr. Minimum rent account xx (With the minimum rent payable to the lessor)
2.	Identifying the amount payable to the lessor	Dr. Minimum rent account xx Cr. Lessor account xx
3.	When payment is made	Dr. Lessor account xx Cr. Bank account xx (With the amount paid)
4.	Closing the royalty expense account	Dr. Income statement/Manufacturing account xx Cr. Royalty expense account xx (With the balance of the royalty expense account)

When royalties are more than minimum rent, and the agreement provides a room for recoupment of previous year's short workings:		
1.	When production is made or royalty is payable	Dr. Royalty expense account xx Cr. Lessor account xx (With the actual royalty payable to the lessor)
2.	When payment is made	Dr. Lessor account xx Cr. Short workings recoverable account xx Cr. Bank account xx (With the amount paid)
3.	Closing the royalty expense account	Dr. Income statement/Manufacturing account xx Cr. Royalty expense account xx (With the balance of the royalty expense account)
When short workings cannot be recouped in future:		
1.	Closing the short workings account	Dr. Income statement xx Cr. Short workings recoverable account xx (With any outstanding short working whose recoupment period is expired)

Example 5.7

On 01st January 2015, BALI Ltd. acquired rights to extracts minerals from NALA Ltd. on the agreement that BALI Ltd. would pay royalty of TZS 150 per kilogram extracted. There was no minimum rent charged by NALA Ltd. on the contract. The following table presents the quantities of minerals extracted for a period of five years:

Year	2015	2016	2017	2018	2019
Output (kgs)	15,000	17,000	18,500	14,000	20,000

Required:

Prepare ledger accounts in the books of BALI Ltd. for a period of five years ending 31st December, 2019.

Solution

In the books of BALI Limited (the lessee):

Dr. **Royalty expense account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	NALA Limited	2,250,000	31st Dec., 2015	Manufacturing	2,250,000
31st Dec., 2016	NALA Limited	2,550,000	31st Dec., 2016	Manufacturing	2,550,000
31st Dec., 2017	NALA Limited	2,775,000	31st Dec., 2017	Manufacturing	2,775,000
31st Dec., 2018	NALA Limited	2,100,000	31st Dec., 2018	Manufacturing	2,100,000
31st Dec., 2019	NALA Limited	3,000,000	31st Dec., 2019	Manufacturing	3,000,000

Dr. **NALA Ltd. account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2015	Bank	2,250,000	31st Dec., 2015	Royalty expense	2,250,000
31st Dec., 2016	Bank	2,550,000	31st Dec., 2016	Royalty expense	2,550,000
31st Dec., 2017	Bank	2,775,000	31st Dec., 2017	Royalty expense	2,775,000
31st Dec., 2018	Bank	2,100,000	31st Dec., 2018	Royalty expense	2,100,000
31st Dec., 2019	Bank	3,000,000	31st Dec., 2019	Royalty expense	3,000,000

Example 5.8

GEITA SOIL Ltd. leased a quarry to VIJANA Miners Ltd. to extract stones under the following terms:

(a) A royalty rent of TZS 200 per cubic meter extracted was payable;

(b) VIJANA Miners Ltd. had the right to recoup short workings within the first four years of the lease agreement; and

(c) A minimum rent of TZS 1,500,000 per annum was payable.

Years	2010	2011	2012	2013	2014	2015
Output (cubic meter of stone)	6,250	6,875	7,200	8,500	10,250	11,000

Required: Prepare ledger accounts in the books of VIJANA Miners Ltd.

Solution

Analysis table

Year	Output	Royalty payable	Minimum rent	Short workings	Recoupment	Irrecoverable short workings	Payment to lessor
2010	6,250	1,250,000	1,500,000	250,000	-	-	1,500,000
2011	6,875	1,375,000	1,500,000	125,000	-	-	1,500,000
2012	7,200	1,440,000	1,500,000	60,000	-	-	1,500,000
2013	8,500	1,700,000	1,500,000	-	200,000	235,000	1,500,000
2014	10,250	2,050,000	1,500,000	-	-	-	2,050,000
2015	11,000	2,200,000	1,500,000	-	-	-	2,200,000

Note:

- The excess of royalties rent over minimum rent in the year 2013 is used to recoup part of the short workings accumulated in 3 years.
- Total accumulated short workings in the first 3 years is TZS 435,000 (250,000 + 125,000 + 60,000). Excess royalties in 2013 is TZS 200,000, therefore short workings will be recouped to a maxmum of TZS 200,000.
- Hence, TZS 235,000 will remain unrecouped by the end of the 4th year [period for which recoupment is allowed]. This amount will be transferred to the income statement.

Dr. **Royalty expense account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2010	GEITA SOIL Ltd.	**1,250,000**	31st Dec., 2010	Manufacturing	**1,250,000**
31st Dec., 2011	GEITA SOIL Ltd.	**1,375,000**	31st Dec., 2011	Manufacturing	**1,375,000**
31st Dec., 2012	GEITA SOIL Ltd.	**1,440,000**	31st Dec., 2012	Manufacturing	**1,440,000**
31st Dec., 2013	GEITA SOIL Ltd.	**1,700,000**	31st Dec., 2013	Manufacturing	**1,700,000**
31st Dec., 2014	GEITA SOIL Ltd.	**2,050,000**	31st Dec., 2014	Manufacturing	**2,050,000**
31st Dec., 2015	GEITA SOIL Ltd.	**2,200,000**	31st Dec., 2015	Manufacturing	**2,200,000**

Dr. **GEITA SOIL Ltd. account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2010	Bank	1,500,000	31st Dec., 2010	Royalty expense	1,250,000
			31st Dec., 2010	Short workings recoverable	250,000
		1,500,000			**1,500,000**
31st Dec., 2011	Bank	1,500,000	31st Dec., 2011	Royalty expense	1,375,000
			31st Dec., 2011	Short workings recoverable	125,000
		1,500,000			**1,500,000**
31st Dec., 2012	Bank	1,500,000	31st Dec., 2012	Royalty expense	1,440,000
			31st Dec., 2012	Short workings recoverable	60,000
		1,500,000			**1,500,000**
31st Dec., 2013	Short workings recoverable	200,000	31st Dec. 2013	Royalty expense	1,700,000
31st Dec., 2013	Bank	1,500,000			
		1,700,000			**1,700,000**
31st Dec., 2014	Bank	**2,050,000**	31st Dec., 2014	Royalty expense	**2,050,000**
31st Dec., 2015	Bank	**2,200,000**	31st Dec., 2015	Royalty expense	**2,200,000**

Dr. **Short workings recoverable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2010	GEITA SOIL Ltd.	**250,000**	31st Dec., 2010	Balance c/d	**250,000**
1st Dec., 2011	Balance b/d	250,000	31st Dec., 2011	Balance c/d	375,000
31st Dec., 2011	GEITA SOIL Ltd.	125,000			
		375,000			**375,000**
1st Dec., 2012	Balance b/d	375,000	31st Dec., 2012	Balance c/d	435,000
31st Dec., 2012	GEITA SOIL Ltd.	60,000			
		435,000			**435,000**
1st Dec., 2013	Balance b/d	435,000	31st Dec., 2013	GEITA SOIL Ltd.	200,000
			31st Dec., 2013	Income statement	235,000
		435,000			**435,000**

Example 5.9

On 01st January, 2017, OBI Ltd. acquired rights to extracts minerals from KAHAMA GOLD on the agreement that OBI Ltd. would pay royalty of TZS 1,000 per kilogram extracted. The minimum rent shall be TZS 1,000,000 and short workings would be recouped within the two years following the payment of short workings. The following table presents the quantities of minerals extracted for a period of five years:

Year	2017	2018	2019	2020	2021
Output (kgs)	1,200	800	700	1,100	1,250

Required:

Prepare ledger accounts in the books of OBI Ltd. for a period of five years ending 31st December, 2021, assuming that the minimum rent account is opened.

Solution

Analysis table

Year	Qnty in kgs	Rate per kgs	Actual royalty	Minimum rent	Short workings (Recoupment)	Short workings	Transferred to income statement	Royalty paid
2017	1,200	1,000	1,200,000	1,000,000	-	-	-	1,200,000
2018	800	1,000	800,000	1,000,000	200,000	200,000	-	1,000,000
2019	700	1,000	700,000	1,000,000	300,000	500,000	-	1,000,000
2020	1,100	1,000	1,100,000	1,000,000	(100,000)	300,000	100,000	1,000,000
2021	1,250	1,000	1,250,000	1,000,000	(250,000)	-	50,000	1,000,000

Dr. **Royalty expense account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2017	KAHAMA GOLD	**1,200,000**	31st Dec., 2017	Manufacturing	**1,200,000**
31st Dec., 2018	Minimum rent	**800,000**	31st Dec., 2018	Manufacturing	**800,000**
31st Dec., 2019	Minimum rent	**700,000**	31st Dec., 2019	Manufacturing	**700,000**
31st Dec., 2020	KAHAMA GOLD	**1,100,000**	31st Dec., 2020	Manufacturing	**1,100,000**
31st Dec., 2021	KAHAMA GOLD	**1,250,000**	31st Dec., 2021	Manufacturing	**1,250,000**

Dr. **Minimum rent account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2018	KAHAMA GOLD	1,000,000	31st Dec., 2018	Royalty expense	800,000
				Short workings recoverable	200,000
		1,000,000			**1,000,000**
31st Dec., 2019	KAHAMA GOLD	1,000,000	31st Dec., 2019	Royalty expense	700,000
				Short workings recoverable	300,000
		1,000,000			**1,000,000**

Dr. **KAHAMA GOLD account** **Cr**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2017	Bank	**1,200,000**	31st Dec., 2017	Royalty expense	**1,200,000**
31st Dec., 2018	Bank	**1,000,000**	31st Dec., 2018	Minimum rent	**1,000,000**
31st Dec., 2019	Bank	**1,000,000**	31st Dec., 2019	Minimum rent	**1,000,000**
31st Dec., 2020	Short workings recoverable	100,000	31st Dec., 2020	Royalty expense	1,100,000
	Bank	1,000,000			
		1,100,000			**1,100,000**
31st Dec., 2021	Short workings recoverable	250,000	31st Dec., 2021	Royalty expense	1,250,000
	Bank	1,000,000			
		1,250,000			**1,250,000**

Dr. **Short workings recoverable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2018	Minimum rent	**200,000**	31st Dec., 2018	Balance c/d	**200,000**
31st Dec., 2019	Balance b/d	200,000	31st Dec., 2019	Balance c/d	500,000
	Minimum rent	300,000			
		500,000			**500,000**
31st Dec., 2020	Balance b/d	500,000	31st Dec., 2020	KAHAMA GOLD	100,000
			31st Dec., 2020	Income statement	100,000
			31st Dec., 2020	Balance c/d	300,000
		500,000			**500,000**
31st Dec., 2021	Balance b/d	300,000	31st Dec., 2021	KAHAMA GOLD	250,000
			31st Dec., 2021	Income statement	50,000
		300,000			**300,000**

Sub-lease

The lease agreement sometimes gives rights to the lessee to sub-contract the right for use of the asset of the lessor. This is known as sub-lease and the person who is sub-contracted is known as a sub-lessee. The relationship between sub-lessee and the lessee is similar to that of the lessor and the lessee. In the case of sub-lease, the lessee takes the legal stand of the lessor to the sub-lessee. The lessee is paid based on the output produced by the sub-lessee. In the most cases the lessee charges a higher price to the sub-lessee than that charged by the original lessor. Profit on such price is transferred to the income statement.

Accounting entries in the books of Lessee with a sub-lease

In addition to the fact that the lessee has to record transactions related to himself and his lessor; the lessee also has to make records for transactions occurring between himself and the sub lessee. Additional accounts are as follows:

Royalty income account: This account records periodical payments made by the user of asset (sub lessee) to the lessee on the basis of actual output made by sub-lessee. It is a nominal account (income account).

Short workings allowable account: This account is used to record the excess amount of minimum rent over the actual royalties allowable to sub-lessee. It is a liability account.

Sub-lessee account: This account is used to record royalty receivable, amount received from sub-lessee and short workings allowable to the lessee, if any. It is an asset account.

The accounting entries:

The following are the accounting entries of royalty transactions in the books of lessee:

SN	Narrations	Details		
1	When production is done by both the lessee and sub-lessee	Dr. Royalty expense account Cr. Lessor account (With the total production of lessee and sub-lessee)	xx	 xx
2	For production made by sub-lessee alone	Dr. Sub-lessee account Cr. Royalty income account (With the value of sub lessee's production)	xx	 xx
3	To record payments from the sub-lessee	Dr. Bank account Cr. Sub-lessee account (With the amount received)	xx	 xx

SN	Narrations	Details
4	When there is a short working and is recouped in future by sub-lessee:	Dr. Sub- lessee account xx Cr. Short workings allowable account xx (With the amount of the excess of minimum rent set for the sub-lessee over his actual royalty)
5	To record royalty payable by lessee on sub-lessees' production	Dr. Royalty income account xx Cr. Royalty account xx (With the value of sub-lessee's production valued at the rate charged to the lessee by the lessor)
6	To record profit on sub-lease at the end of each year	Dr. Royalty receivable account xx Cr. Income statement xx (With sub-lessee's production valued at the difference between lessee rate's and land lessor's)
7	To record short workings irrecoverable in future by sub-lessee	Dr. Short workings allowable account xx Cr. Income statement xx (With short working irrecoverable by the sub-lessee as at the year-end)

Ledger accounts in the books of sub-lessee

Ledger accounts and journal entries in the books of sub-lessee will be the same as those recorded by the lessee in relation to his lessor. The sub-lessee will act as the lessee while the lessee will now be the lessor to the sub-lessee.

Example 5.10

NAMANGA Ltd. acquired rights from BASCO Ltd. to manufacture and sell a certain brand of perfume on the following terms:

(a) Royalty shall be paid on the number of bottles manufactured at TZS 20 per bottle;
(b) The minimum royalty in any one year shall be TZS 500,000;
(c) Short working will be recouped within the one year following the year of short workings;
(d) The agreement to become effective on 1st July, 2016 and
(e) All settlements were made on 31st December, of each year.

On 1st January, 2017 NAMANGA Ltd. granted rights to TUMAINI Ltd. to manufacture and sell the same perfume on following terms:

(i) Royalty shall be paid on number of bottlers manufactured at TZS30 per bottle,

(ii) Minimum royalty in any one year shall be TZS 200,000,

(iii) Short workings will be recouped only in the year following the year of short workings.

The following production information is also provided:

Year	Number of bottles manufactured	
	NAMANGA Ltd.	**TUMAINI Ltd.**
2016	20,500	-
2017	11,000	6,000
2018	14,000	7,000
2019	16,000	11,000
2020	12,000	5,000

Required:

Show the relevant ledger accounts in the books of NAMANGA Ltd. for the years ended 31st December, 2016 to 31st December, 2020.

Solution

Computations of the original lessee are tabulated as follows:

Analysis table for the original lessee

Year	Output (bottles)	Actual royalty	Minimum rent	Short workings	Short workings recouped	Irrecoverable short workings	Royalty paid
2016	20,500	410,000	500,000	90,000	-	-	500,000
2017	17,000	340,000	500,000	160,000	-	90,000	500,000
2018	21,000	420,000	500,000	80,000	-	160,000	500,000
2019	27,000	540,000	500,000	-	40,000	40,000	500,000
2020	17,000	340,000	500,000	160,000	-	160,000	500,000

Note:

Total output above is the aggregate of bottles manufactured by both the lessee and sub-lessee.

Computations of the sub-lessee are tabulated as follows:

Analysis table – Sub-lessee

Year	Output (bottlers)	Actual royalty	Minimum rent	Short workings	Short workings recouped	Irrecoverable short workings	Royalty paid
2017	6,000	180,000	200,000	20,000	-	-	200,000
2018	7,000	210,000	200,000	-	10,000	10,000	200,000
2019	11,000	330,000	200,000	-	-	-	330,000
2020	5,000	150,000	200,000	50,000	-	50,000	200,000

In the books of NAMANGA Ltd.:

Dr. **BASCO Ltd. account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31^{st} Dec., 2016	Bank	500,000	31^{st} Dec., 2016	Royalty expense	410,000
			31^{st} Dec., 2016	Short workings recoverable	90,000
		500,000			**500,000**
31^{st} Dec., 2017	Bank	500,000	31^{st} Dec., 2017	Royalty expense	340,000
			31^{st} Dec., 2017	Short workings recoverable	160,000
		500,000			**500,000**
31^{st} Dec., 2018	Bank	500,000	31^{st} Dec., 2018	Royalty expense	420,000
			31^{st} Dec., 2018	Short workings recoverable	80,000
		500,000			**500,000**
31^{st} Dec., 2019	Bank	500,000	31^{st} Dec., 2019	Royalty expense	540,000
31^{st} Dec., 2019	Short workings recoverable	40,000			
		540,000			**540,000**
31^{st} Dec., 2020	Bank	500,000	31^{st} Dec., 2020	Royalty expense	340,000
			31^{st} Dec., 2020	Short workings recoverable	160,000
		500,000			**500,000**

Dr. **Royalty expense account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2016	BASCO Ltd.	**410,000**	31st Dec., 2016	Manufacturing	**410,000**
31st Dec. 2017	BASCO Ltd.	340,000	31st Dec., 2017	Manufacturing	220,000
			31st Dec. 2017	Royalty income	120,000
		340,000			**340,000**
31st Dec., 2018	BASCO Ltd.	420,000	31st Dec., 2018	Manufacturing	280,000
			31st Dec. 2018	Royalty income	140,000
		420,000			**420,000**
31st Dec., 2019	BASCO Ltd.	540,000	31st Dec., 2019	Manufacturing	320,000
			31st Dec., 2019	Royalty income	220,000
		540,000			**540,000**
31st Dec., 2020	BASCO Ltd.	340,000	31st Dec., 2020	Manufacturing	240,000
			31st Dec., 2020	Royalty income	100,000
		340,000			**340,000**

Dr. **Short workings recoverable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2016	BASCO Ltd.	**90,000**	31st Dec., 2016	Balance c/d	**90,000**
1st Dec., 2017	Balance b/d	90,000	31st Dec., 2017	Income statement	90,000
31st Dec., 2017	BASCO Ltd.	160,000	31st Dec., 2017	Balance c/d	160,000
		250,000			**250,000**
1st Dec., 2018	Balance b/d	160,000	31st Dec., 2018	Income statement	160,000
31st Dec., 2018	BASCO Ltd.	80,000	31st Dec., 2018	Balance c/d	80,000
		240,000			**240,000**

1st Dec., 2019	Balance b/d	80,000	31st Dec., 2019	BASSO Ltd. account	40,000
			31st Dec., 2019	Income statement	40,000
31st Dec., 2020	BASCO Ltd.	80,000	31st Dec., 2020	Income statement	80,000
		160,000			**160,000**

Dr. **Royalty income account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2017	Royalty expense	120,000	31st Dec., 2017	TUMAINI Ltd.	180,000
31st Dec., 2017	Income statement	60,000			
		180,000			**180,000**
31st Dec., 2018	Royalty expense	140,000	31st Dec., 2018	TUMAINI Ltd.	210,000
31st Dec., 2018	Income statement	70,000			
		210,000			**210,000**
31st Dec., 2019	Royalty expense	220,000	31st Dec., 2019	TUMAINI Ltd.	330,000
31st Dec., 2019	Income statement	110,000			
		330,000			**330,000**
31st Dec., 2020	Royalty expense	100,000	31st Dec., 2020	TUMAINI Ltd.	150,000
31st Dec., 2020	Income statement	50,000			
		150,000			**150,000**

Workings:

Computations of profit on sub-lease:

The above profit on sub-lease is computed as follows:

Royalty receivable rate	-	TZS 30
Royalty payable rate	-	TZS 20
Profit	**-**	**TZS 10**

Total profit from the year 2017 to 2020:

2017: 6,000 bottles × TZS 10 = TZS 60,000
2018: 7,000 bottles × TZS 10 = TZS 70,000
2019: 11,000 bottles × TZS 10 = TZS 110,000
2020: 5,000 bottles × TZS 10 = TZS 50,000

Dr. **TUMAINI Ltd. account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2017	Royalty income	180,000	31st Dec., 2017	Bank	200,000
31st Dec., 2017	Short workings allowable	20,000			
		200,000	31st Dec., 2018	Bank	**200,000**
31st Dec., 2018	Royalty income	210,000	31st Dec., 2018	Short workings allowable	200,000
					10,000
31st Dec., 2019	Royalty income	**210,000**	31st Dec., 2019	Bank	**210,000**
31st Dec., 2020	Royalty income	**330,000**	31st Dec., 2020	Bank	**330,000**
	Short workings allowable	150,000			200,000
		50,000			
		200,000			**200,000**

Dr. **Short workings allowable account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2017	Balance c/d	**20,000**	31st Dec., 2017	TUMAINI Ltd.	**20,000**
31st Dec., 2018	TUMAINI Ltd.	10,000	01st Dec., 2018	Balance b/d	20,000
31st Dec., 2018	Income statement	10,000			
		20,000			**20,000**
31st Dec., 2020	Income statement	**50,000**	31st Dec., 2020	TUMAINI Ltd.	**50,000**

Exercise 5.3

1. DEKA Ltd. acquired rights from NASSA Ltd. to manufacture and sell a certain brand of perfume on the following terms:
   (a) Royalty shall be paid on number of bottles manufactured at TZS 200 per bottle.
   (b) The minimum royalty in any one year shall be TZS 500,000.
   (c) Short workings will be recouped within the first three years of the contract.
   (d) The agreement to become effective on 1st July, 2018; and
   (e) All settlements were made on 31st December, each year.

   On 1st January, 2020, DEKA Ltd. granted right to MWINULA Ltd. to manufacture and sell the same perfumes on the following terms:
   (i) Royalty shall be paid on number of bottles manufactured at TZS 300 per bottle/per unit;
   (ii) The minimum royalty in any one year shall be TZS 200,000; and
   (iii) Short workings recouped only in the year of agreement following the year of short workings.

   The following information is provided:

Years	DEKA Ltd.	MWINULA Ltd.
2018	8,000	-
2019	11,000	-
2020	14,000	7000

Years	DEKA Ltd.	MWINULA Ltd.
2021	16,000	11,000
2022	12,000	5000

Required: Prepare ledger accounts in the books of DEKA Ltd.

2. ASHA Ltd. is operating a stone quarry under lease from ALEX Ltd., the owner of the quarry. The lease was for a period of 10 years effectively from 1st January, 2013. The terms for the lease stipulated that: Royalty is TZS 40,000 per ton of stones raised; minimum rent was TZS 10,000,000 per annum with the right to recoup short workings in the first four years of the contract.

   ASHA Ltd. granted a sub-lease to PRISCA Ltd. of one third of the area of the land for a period of four years from January, 2014, for a minimum rent of TZS 80,000 per annum; royalty TZS 60,000 a ton of stones raised. The right of recoupment of short workings was granted for the first two years from the date of the sub-lease.

   The output for the first four years was as follows:

Year	ASHA Ltd. (tons)	PRISCA Ltd. (tons)
2013	220	nil
2014	240	120
2015	300	160
2016	320	190

Required:

(a) Prepare the necessary journal entries in the books of ASHA Ltd.

(b) Prepare ledger accounts in the books of ASHA Ltd.

Chapter summary

1. Royalty is the amount of money paid by a third party or lessee, to the owner of an asset (lessor), for the use of the asset.
2. Minimum rent is amount of money which the lessee is required to pay the lessor, whether he has derived the benefit or not out of the right vested to him by the lessor. The minimum rent is normally fixed at the time when the lessor enters into an agreement with the lessee. At the end of the period, the lessee will be required to pay the minimum rent or the actual royalty amount, whichever is higher.
3. Short working is the excess of minimum rent over the actual royalty. When the royalty agreement gives the lessee the right to recover excess amount paid by the lessee to the lessor in the subsequent years is known as recoupment.
4. Right to recoupment in any royalty agreement can either be a fixed right or a floating right. In fixed right the lessee has the right to recoup short workings only for a fixed time period while in floating right, the lessee has a right to recover the short workings of any year during the next agreed number of years, following the payment of short workings.

Revision exercise

1. Briefly explain the meaning of royalty.
2. Distinguish between the following terms as they are used in accounting for royalties:
   (a) Royalty and lease
   (b) Royalty and rent
   (c) Fixed and floating right
3. On 1st January, 2018, a coal company took the lease of coal field at a royalty of TZS 5,000 per ton of coal raised with the minimum rent of TZS 15,000,000 per annum and with right to recoup short workings on the first two years of the contract. During the first three years the quantities of coal raised were 2,000 tones, 4,000 tones and 3,500 tons respectively.

   Required:

   Prepare the ledger accounts in the books of lessor and lessee.
4. ASAFU Co. Ltd. acquired right to extract mineral ore from the mines belonging to LAWI Ltd. on the following terms:
   (a) Royalties shall be TZS 30,000 per ton of ore extracted;
   (b) Minimum royalty shall be TZS 7,000,000 per month;
   (c) Settlement will be made on monthly basis on the last date of each month; and
   (d) The agreement came into effect on 1st May, 2019.

   The following quantities were extracted by ASAFU Co. Ltd. during the first five months:

Month	May	June	July	August	September
Output (in tons)	200	300	400	460	500

   Required:

   Prepare the necessary journal entries and prepare ledger accounts in the books of ASAFU Co. Ltd.
5. On 1st January, 2017 JULIA Ltd. leased a piece of land for a minimum rent of TZS500,000 in the first year, TZS1,000,000 in the second year and thereafter TZS1,500,000 per annum, merging into royalty of TZS 250 per ton, with the power to recoup short workings over the first three years only. The annual output for the four years ending 30th September, 2020 were 500, 3,000, 8,000, and 12,000 tons respectively.

   Required:

   Prepare journal entries to record the above transactions in the books of JULIA Ltd.

6. BENKO Ltd. acquired the right to manufacture and sell a medicine designed by JABALI Ltd. on the following terms:
   (a) Royalty to be paid at TZS 3,000 per unit of medicine sold;
   (b) Minimum royalty per year to be TZS 5,000,000; and
   (c) Short workings to be recouped one year following the year in which short workings occurred.

   The following are the sales figure for the first five years:

Year	2015	2016	2017	2018	2019
Sales (units)	1,000	1,500	2,000	2,500	3,000

   Required:
   Prepare journal entries to record transactions relating to the royalty in the books of BENKO Ltd. assuming that settlements are made on 31st December.

7. HOF Ltd. granted a lease to XYZ Mines Ltd. to extract gold from land owned by him. The agreement stipulated the following terms:
   (i) A royalty of TZS 45 per kilogram of gold extracted;
   (ii) A minimum rent of TZS 25,000,000 per annum; and
   (iii) Short workings are recoverable up to the end of the fourth year of operations.

   During the first four years, the following quantities were extracted:

Year	2015	2016	2017	2018
Output (kgs)	450,000	520,000	612,000	625,000

   The accounting year of the lessee XYZ Mines Ltd., end on 31st December, the date on which the payment to HOF Ltd., the landlord, is made.

   Required:
   Prepare the appropriate accounts in the books of HOF Limited for each of the four years.

Chapter Six

Company accounts

Introduction

A company is a form of business that has been more successful in the world. This form is suitable where many resources are required and the operation has to be carried out in a large scale. In this chapter you will learn about the basics of company accounts, raising of share capital, accounting entries for issued shares and the accounting for forfeiture and re-issue of shares. You will also learn about the redemption of preference shares, redemption of debentures and preparation of the financial statements of the companies. The competencies developed will enable you to effectively manage the record keeping and accounting for financial transactions related to company's share capital and debentures.

Introduction to company accounts

A company is an association of persons created by law with a perpetual succession and a common seal. It is a form of business organisation which allows a group of people to pool their resources together (energy, time, and money) for profit. A company comes into legal existence when its founders comply with the country's incorporation requirements as stipulated in the Companies Act, 2002. The most important feature of a company is that it is a legal entity, existing entirely separate and distinct from its owners. A company is characterized by the following common features:

(a) It is a voluntary association of two or more persons for business purpose;

(b) It is a distinct separate person (legal entity) in the eyes of law;

(c) It has a common seal;

(d) It has a perpetual succession because of its separate legal entity; and

(e) The liability of the members of a company limited to the extent of the unpaid price of share-holdings or by guarantee. In rare situations, the liability of members can be unlimited.

Types of companies

There are basically two categories of companies namely: statutory companies and registered companies. These classes are further explained as follows:

Statutory companies

These are state owned companies formed by the special Act of the Parliament. They are not required to submit a Memorandum or Articles of Association, nor are they required to use the word "Limited" after their name. Their activities are mainly governed by the special Act of the Parliament; and the Controller and Auditor General (CAG) conducts the annual audit of their financial statements. The Tanzania Electric Company (TANESCO), Air Tanzania Company Ltd. (ATCL), and Tanzania Railway Corporation (TRC) are examples of statutory companies in Tanzania.

Registered companies

These are companies registered under the Companies Act of the respective country. Registered companies may are further categorised as *Private* or *Public companies,* and as *limited or unlimited.*

In Tanzania, Sec.3.- (I) of the Companies Act, 2002 states that "Any two or more persons, associated for any lawful purpose may, by subscribing their names to a memorandum of association and otherwise complying with the requirements of this Act in respect of registration, form an incorporated company, with or without limited liability".

Limited and unlimited liability companies

This categorisation is based on the extent to which liability of the company may be extended to the member's (shareholder's) personal property in the event the company is being wound up and the assets of the company becomes insufficient to cover for all the outstanding liabilities. A limited liability company is a company having the liability of its members limited to the unpaid amount on shares held by such members (a company limited by shares); or limited by the amount, its members have agreed to contribute to the assets of the company in the event of it being wound up (a company limited by guarantee). This means, members have committed to contribute certain amount at the time of company's liquidation. In limited liability companies, the members of the company (shareholders) cannot be held personally liable for the company's debts or liabilities in the event of winding up.

Unlimited Liability Company is a company that does not have any limit on the liability of its members. When the company's property is not sufficient to pay-off its debts during winding-up of the company, the private property of its members can be used for that purpose. In other words, the creditors can claim their dues from belongings of the company members.

Private and public companies

This categorisation is based on the number of members in a company (shareholders). A private company is a registered company with the following features:

(a) Its minimum number of owners/ shareholders (membership) is two and cannot exceed fifty.

(b) Is not allowed to offer its shares for subscription to the public;

(c) Is not allowed to trade its shares in the stock exchange;

(d) Can be a limited or an unlimited company; and

(e) Has to get its accounts audited by the certified audit firm and has to file the copies of financial statements with the registrar of companies.

Public companies are companies which are not private. In Tanzania, the Companies Act, 2002, Sec.3.- (3) States that, a "public company" is a company limited by shares or limited by guarantee and having a share capital, being a company the memorandum of which states that it is to be a public company. The common features of a public company are:

(a) Minimum number of owners/ shareholders (membership) is seven and its maximum may exceed fifty;

(b) They are allowed to offer their shares to the public at large for subscription;

(c) They are required to use the word Public Limited Company, or the abbreviation "PLC" as part of its name;

(d) If quoted/listed they are allowed to trade in the stock exchange market; and

(e) Has to get its accounts audited by the certified audit firm and has to file the copies of financial statements with the registrar of companies.

Procedures for raising capital (equity) of the company

Equity market is a market where shares of companies are issued and traded. The equity market facilitates for companies to raise long-term capital using sale of shares, to finance their long-term financial requirements. Shares, once issued may be listed on the stock exchange in order to provide an exit mechanism for investors when they wish to exit as well as facilitating price discovery. The following are the procedures to be followed when issuing shares to the public for subscription:

Issue of prospectus: Prospectus is an invitation to the public at large, inviting them to subscribe for the shares of the company. The prospectus contains complete details such as face value of each share, issue price of share, authorized share capital, the number of shares offered, name of the directors, terms of issue, minimum subscription, type of investment, previous year's performance, opening and closing dates, application form and requisite fees, allotment, call on dates and bank details for deposit.

Receipt of application: After the receipt of the prospectus, interested investors can make an application and deposit specified application money with the scheduled bank as mentioned in the prospectus.

Shares allotment: When applications have been received, company's management will allocate the shares to applicants. This means, they will decide on whether to give shares to applicants as applied or otherwise. After such allocations, allotment letter will be given to applicants for next procedure to follow.

Receiving allotment money: After shares have been allotted to successful applicants, next step is to receive allotment money on due date.

Receiving call money: After the receipt of application and allotment money, the money that remains unpaid is call money. A call is a demand made by the company asking the shareholders to remit the called-up amount on shares allotted to them. There may be one or more calls, depending on the funds requirements of the company. If the company decides to call the share money in more than two instalments the other instalment is/are termed as call money (i.e. first call, second call or final call).

Shares

A share is a unit of ownership of a company. It is a certificate with a denominated value, which shows ownership of a stake in a company. Shares issued to the public would be either paid for in full at application or paid for in instalments.

Types of shares

There are two types of shares namely equity shares and preference shares.

Equity shares

Equity shares are also known as ordinary shares. These shares are the main source of finance for a company giving the shareholders rights to ownership, vote, get dividend when the company earns profit and have claims on the assets. Equity shareholders are the real owners of the company and have a control over the management of the company. Equity share capital cannot be redeemed during the lifetime of the company.

Preference shares

These are the shares which have preferential right to get dividend and get back the initial investment at the time of winding up of the company. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights. Preference shares may be classified into cumulative preference shares, non-cumulative preference shares, redeemable preference shares and irredeemable preference shares. With cumulative preference shares, the dividend that was not paid in years the company did not make profit, will accumulate, and be paid in future years when the company earns profit. Non-cumulative preference shareholders are not entitled to such treatment. Redeemable preference shares will be bought back by the company on the stated redemption date. As for equity shares, a company cannot buy back irredeemable preference shares.

Terms of issue of shares

Companies issue shares to raise money from investors who want to invest. The funds raised are used by companies to finance the development and growth of the business. Company issues shares which allow the shareholders to have a stake in the company's equity as well as a share in its profits, in form of dividends. To issue shares, a company follows rules and procedures issued by the Companies Act and Capital and Securities Market Authority (CSMA) of Tanzania.

Usually, shares are priced at a certain value by the owners or promoters before they are issued for subscriptions. This value is called par value or face value or nominal value of the share. Shares can be issued for subscription at par, at a discount or at a premium. The par value is used as a base for establishing the issuing price.

Shares issued at par (nominal/face) value

Shares are issued at par when the issue price or market price is equal to nominal value or face value of share. For example if the face value of share is TZS 1,000 and the issue price is TZS 1,000, then we say the shares have been issued at par. The par value of shares is maintained in a share capital account.

Shares issued at premium

Share premium is the amount paid over and above the nominal value of the shares when the shares are issued to the public. The law requires share premium to be maintained separate from nominal value of the share. The amount paid over and above the par value is maintained in a share premium account. The share premium can be used for:

(a) Issuing fully paid bonus shares, i.e. free shares to existing shareholders;
(b) Writing off preliminary expenses or formation expenses of the company;
(c) Writing off discount on issue of shares or debentures; and
(d) Writing off premium on redemption of redeemable preference shares if the redemption is not through new issue of shares.

Shares issued at discount

When a company issues shares to the public at a price below the par value, the differences is called share discount. Share capital has to appear at full nominal value of the shares and a discount on issue of shares account should be opened to take care of the discount element. On the statement of financial position, the discount amount will appear under equity section as a deduction from equity. Companies Act of 2002 specify the conditions which must be fulfilled by the company before it issues shares at a discount as:

(a) There must be an approval by members' resolution and sanctioned by the court;
(b) At least one year of trading must have lapsed before such an issue can be made;
(c) Shares should be issued within one month after court's sanction; and
(d) The maximum discount rate should be specified.

Terms of payment for issued shares

Money on issued shares can be paid in full on application stage or paid in instalments. When full amount is required on application, interested investors are required to pay the full issue price when applying for the shares. Alternatively, the company may decide to collect the issue price in two or more instalments. The first instalment is known as application money, where applicants must make payment at time of applying for the shares. The second instalment is called allotment money. Usually, not all applicants are given shares.

There are various reasons that may cause some applicants not to be allotted shares. One main reason is when the number of shares applied is higher than the number of shares available for issue. In this case some applicants may be issued shares and some may not. Issuing of shares to the approved applicants is what is called allotment. Allotment therefore, is the creation and issue of new shares to the applicants, who then becomes the owners of the company. During allotment, the approved allottees are required to deposit a certain amount of money being part of the issuing price, this amount is called allotment money.

After allotting the shares, the amount that remain outstanding will be demanded by the company as and when needed. The stages to demand such amount are called calls. Therefore the instalments made after the allotment stage are known as calls money. There may be one or more calls, depending on the funds requirements of the company. For example, a company may issue shares to the public for subscription at TZS 300 per share. However, the company may have planned that TZS 100 be paid when a person makes application, TZS 50 be paid when shares are allotted, TZS 50 on first call, another TZS 50 on second call, and the remaining TZS 50 on final call.

Oversubscription and under subscription for shares

When shares are offered to the public, there is a possibility that the amount of applications may be more or less than what was offered. Where fewer shares are applied for than those offered, the situation is referred to as under subscription. On the other hand, if shares applied are more than the number of shares offered for subscription, this is referred to as over subscription. Over subscription happens when investors foresee a bright future for the issuing company, which motivates most of them to subscribe for many shares.

If shares have been oversubscribed, the company has an alternative of either to refund the excess money to unsuccessful applicants or issue shares on a pro-rata basis to all applicants and retain the excess money for the shares which could not be issued and use that money to reduce future liabilities. The pro-rata issue is the most equitable basis of issuing shares where there is an over-subscription. The maximum number of shares the company can issue is limited to those shares, which have been offered to the public.

If pro-rata issue has been made, the problem arises in determining what will be the amount of money, which will be received at the allotment stage, and at call stages. The issue is further complicated if some of shareholders fail to pay allotment liability and hence lead to calls in arrears which will have to be adjusted with their excess money retained on application stage. The remaining amount unpaid on those shares will appear as calls in arrears at the allotment stage and will be shown under current assets in the statement of financial position.

Accounting entries for issue of shares

When shares are issued at par

Amount received in full at application stage

Accounting entries for shares issued at par and the amount received in full at application stage are as follows:

When full amount is received at an application stage, based on shares applied.	Dr. Bank account xx Cr: Share capital account xx (With the nominal value of shares applied for)

Example 6.1

BINAMU Ltd. has an authorized share capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued at par to the public for subscription. All shares were subscribed and amount paid in full at application stage on 15th January, 2022.

Required: Open up the ledger accounts to record the above transactions in the books of BINAMU Ltd. for the year ended 31st December, 2022.

Solution:

Dr. **Bank account** **Cr.**

Date	Details	TZS '000'	Date	Details	TZS '000'
15th Jan., 2022	Equity share capital	**1,000,000**	31st Dec., 2022	Balance c/d	**1,000,000**
1st Jan., 2023	Balance b/d	1,000,000			

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS '000'	Date	Details	TZS '000'
31st Dec., 2022	Balance c/d	**1,000,000**	15th Jan., 2022	Bank	**1,000,000**
			1st Jan., 2023	Balance b/d	1,000,000

Amount received in instalments

Accounting entries for shares issued at par and amount is paid in instalments are as follows:

1. When cash is received at an application stage based on shares applied.	Dr. Bank account xx Cr: Application account xx (With cash received)
2. When allotment is made, the nominal value of the shares, received at application and allotment stage has to be recognized in the share capital account.	Dr. Application account xx Cr: Share Capital account xx (With the amount received at the application stage)
	Dr. Allotment account xx Cr: Share Capital account xx (With the amount received at the allotment stage)
3. When allotment money is received after notifying shareholders to pay allotment money after being successful.	Dr. Bank account xx Cr. Allotment account xx (With cash received on allotment stage)
4. When calls are made the nominal part of the share price has to be recognized in the share capital account	Dr. Call account xx Cr. Share Capital account xx (With the amount receivable at the call stage)
5. When money relating to the call stage is received.	Dr. Bank account xx Cr. Call account xx (With the money received at the call stage)

Example 6.2

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued at par to the public and payments for shares were made in instalments as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 300 at allotment stage on 15th February, 2022; and
- TZS 200 at first call stage on 15th March, 2022.

Required: Open up ledger accounts to record the above transactions in books BINAMU Ltd. for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	1,000,000
15th Feb., 2022	Allotment	300,000			
15th March., 2022	First call	200,000			
		1,000,000			**1,000,000**
1st Jan., 2023	Balance b/d	1,000,000			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**300,000**	15th Feb., 2022	Bank	**300,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	1,000,000	15th Feb., 2022	Application	500,000
			15th Feb., 2022	Allotment	300,000
			15th March., 2022	First call	200,000
		1,000,000			**1,000,000**
			1st Jan., 2023	Balance b/d	1,000,000

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March., 2022	Equity share capital	**200,000**	15th March., 2022	Bank	**200,000**

Exercise 6.1

(a) Explain the meaning of the term "share" and distinguish different types of shares.

(b) 1,000 equity shares of nominal value of TZS 1,000 each have been issued and payments are made as follows:

- TZS 200 payable at application on 1st April, 2022;
- TZS 300 payable at allotment on 1st June, 2022 ; and
- TZS 500 payable at first and final call stage on 31st December, 2022.

Required:

Open up necessary ledger accounts to record the above issue of shares, closing the books on 31st December, 2022.

When shares are issued at premium

Normally, the share premium is recognized at allotment stage. However, the premium can also be recognized at a call stage. Accounting entries to record premium on issue are as follows:

1. When the premium is recognized at allotment stage	Dr. Allotment account xx Cr. Share Premium account xx (With the premium element relating to the allotment money received)
2. When the premium is recognized at the call stage	Dr. Call account xx Cr. Share Premium account xx (With the premium element relating to the call money received)

Example 6.3

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public for subscription at TZS 1,100 per share. All shares were subscribed and fully paid for at application stage on 15th January, 2022.

Required:

Prepare ledger accounts to record the above transactions in books BINAMU Ltd. for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Equity share capital	1,000,000	31st Dec., 2022	Balance c/d	1,100,000
15th Jan., 2022	Share premium	100,000			
		1,100,000			1,100,000
1st Jan., 2023	Balance b/d	1,100,000			

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	1,000,000	15th Jan., 2022	Bank	1,000,000
			1st Jan., 2023	Balance b/d	1,000,000

Dr. **Share premium** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec. 2022	Balance c/d	100,000	15th Jan., 2022	Bank	100,000
			1st Jan., 2023	Balance b/d	100,000

Example 6.4

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public for subscription at TZS 1,100. All shares were subscribed for and the payments were as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 400 (including premium) at allotment stage on 15th February, 2022; and
- TZS 200 at first call stage on 15th March, 2022;

Required:

Open up ledger accounts to record the above transactions in books BINAMU Ltd. for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	1,100,000
15th Feb., 2022	Allotment	400,000			
15th March.2022	First call	200,000			
		1,100,000			**1,100,000**
1st Jan., 2023	Balance b/d	1,100,000			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	1,000,000	15th Feb., 2022	Application	500,000
			15th Feb., 2022	Allotment	300,000
			15th March, 2022	First call	200,000
		1,000,000			**1,000,000**
			1st Jan., 2023	Balance b/d	1,000,000

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Share capital	300,000	15th Feb., 2022	Bank	400,000
15th Feb., 2022	Share premium	100,000			
		400,000			**400,000**

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	**100,000**	15th Feb., 2022	Allotment	**100,000**
			1st Jan., 2023	Balance b/d	100,000

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	Equity share capital	200,000	15th March, 2022	Bank	200,000

Exercise 6.2

MAUA Ltd. issued 1,000 equity shares of nominal value of TZS 1,000 each. The payments were made as follows:

- TZS 200 payable at application on 1st July, 2020;
- TZS 400 (including premium) payable at allotment on 1st September, 2020; and
- TZS 500 payable at first and final call stage on 31st December, 2020;

Required:
Open the ledger accounts to record the above issue of shares, assuming that MAUA Ltd. closes its books on 31st December, every year.

Shares issued at discount

Accounting entry to record amount of discount on issue of shares is as follows;

Recognition of discount on issues in the share price	Dr. Discount on Issue of shares account Cr. Allotment or call account (With discount offered on the shares issued)	xx	 xx

Example 6.5

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public at TZS 850. All shares were subscribed for, and the payments were as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 300 at allotment stage on 15th February, 2022; and
- TZS 50 at first call stage on 15th March, 2022.

Required:

Open the ledger accounts to record the above transactions for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	850,000
15th Feb., 2022	Allotment	300,000			
15th March, 2022	First call	50,000			
		850,000			**850,000**
1st Jan., 2023	Balance b/d	850,000			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec.2022	Balance c/d	1,000,000	15th Feb., 2022	Application	500,000
			15th Feb., 2022	Allotment	300,000
			15th Feb., 2022	Discount on issue	150,000
			15th March, 2022	First call	50,000
		1,000,000			**1,000,000**
			1st Jan., 2023	Balance b/d	1,000,000

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**300,000**	15th Feb., 2022	Bank	**300,000**

Dr. **Share discount account** **Cr.**

Date	Details	TZS"000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**150,000**	31st Dec., 2022	Balance c/d	**150,000**
1st Jan., 2023	Balance b/d	150,000			

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS"000"
15th March, 2022	Equity share capital	**50,000**	15th March, 2022	Bank	**50,000**

Exercise 6.3

BAHAMA Club issued 1,000 equity shares of nominal value of TZS 1,000 each on 1st July, 2021. The payments were arranged to be as follows:

- TZS 300 payable at application;
- TZS 300 (including premium) payable at allotment on 30th September, 2021; and
- TZS 450 payable at first and final call stage on 31st December, 2021.

Required:

Open ledger accounts to record the above transactions in the books of BAHAMA Club for the year ended 31st December, 2021.

Calls in Arrears

When a call is due, the company will remind shareholders to pay money related to the specific stage. However, on due date it may happen that some shareholders may fail to pay the related call money. The amount unpaid is called call in arrears and is recognised in the calls in arrears account. Basically, calls in arrears account is a receivable's account, representing the amount shareholders are owed by the company. Thus the calls in arrears account should always have a debit balance. At the statement of financial position date, if the arrears are still outstanding, should be shown in the statement of financial position as a reduction to the issued share capital.

Accounting entries to record amount of call unpaid by shareholders are as follows;

Recognition of unpaid amount of the share price in the call in arrears account, when the unpaid amount relates to allotment stage.	Dr. Calls in arrears account xx Cr. Allotment account xx (With unpaid amount related to allotment stage)
Recognition of unpaid amount of the share price in the call-in arrears account, when the unpaid amount relates to call stage.	Dr. Calls in arrears account xx Cr. Call account xx (With unpaid amount related to call stage)

Example 6.6

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public at TZS 1,100. All shares were subscribed and the payments were as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 400 (including premium) at allotment stage on 15th February, 2022; and
- TZS 200 at first call stage on 15th March, 2022.

Shareholders who applied for 2,000 shares failed to pay allotment and first call money on due date

Required:

Open up the ledger accounts to record above transactions in books of BINAMU Ltd. for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	1,098,800
15th Feb., 2022	Allotment (W1)	399,200			
15th March, 2022	First call (W2)	199,600			
		1,098,800			**1,098,800**
1st Jan., 2023	Balance c/d	1,098,000			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Workings

W1= (1,000,000 - 2,000) × 400 = TZS 399,200

W2= (1,000,000 - 2,000) × 200 = TZS 199,600

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	100,000	15th Feb., 2022	Application	500,000
			15th Feb., 2022	Allotment	300,000
			15th March, 2022	First call	200,000
		200,000			**1,000,000**
			1st Jan., 2023	Balance b/d	100,000

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Share capital	300,000	15th Feb., 2022	Bank	399,200
15th Feb., 2022	Share premium	100,000	15th Feb., 2022	Call in arrears	800
		400,000			**400,000**

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	**100,000**	15th Feb., 2022	Allotment	**100,000**
			1st Jan., 2022	Balance b/d	100,000

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	Equity share capital	200,000	15th March, 2022	Bank	199,600
			15th March, 2022	Calls in arrears	400
		200,000			**200,000**

Dr. **Call in arrears account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Allotment	800	31st Dec., 2022	Balance c/d	1,200
15th March, 2022	First call	400			
		1,200			**1,200**
1st Jan., 2023	Balance b/d	1,200			

Exercise 6.4

(a) State and explain the possible modes of payment for issued shares.

(b) 5,000 shares of TZS 1,000 each were offered to the public at TZS 1,200 each, payable as TZS 200 at application on 25th February, 2020; TZS 300 (including premium) at allotment on 31st March, 2020; TZS 400 at first call on 30th June, 2020; and the balance on second and final call which was made on 30th September, 2020. Applicant with 250 shares did not pay for allotment and calls money; whereas a holder of 500 failed to pay for the first call on due but paid together with the final call.

Required: Open the ledger accounts to record the above issue of shares for the year 2020.

Calls in Advance

When a demand for payment is made, some shareholders may decide to pay at that stage the whole or the next calls money ahead of time, i.e. before the time fixed for the calls to accrue for their payment. The amount paid ahead of time should not be treated as share capital but as liability and it should be accounted for in the 'calls in advance account'. The account will always have a credit balance. The advance payment can be paid together with the allotment and/or on calls stages. When the time for the call becomes due, the advance payment will be recognized as share capital or share premium as the case may be and would be transferred from calls in advance account to the respective call account. If at the end of the period, the calls in advance have not yet matured, it should be shown separately as a liability in the statement of financial position.

Accounting entries to record amount paid in advance by shareholders are as follows:

If the amount of advance received with respect to allotment stage	Dr. Allotment account xx Cr. Calls in Advance account xx (With amount paid ahead of time at allotment stage)
If the amount of advance received with respect to call stage	Dr. Allotment/Nth Calls account xx Cr. Calls in Advance account xx (With the amount paid ahead of time at a calls stage
On due date for receiving respective call money	Dr. Calls in Advance account xx Cr. Allotment/Nth Calls account xx

Example 6.7

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public at TZS 1,100. All shares were subscribed for, and the payments were as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 400 (including premium) at allotment stage on 15th February, 2022;
- TZS 200 at first and final call stage on 15th March, 2022.

Shareholders with 4,000 shares paid first call money at the allotment stage.

Required:

Open up the ledger accounts to record the above transactions for the year ended 31st December, 2022.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	1,100,00
15th Feb., 2022	Allotment (W1)	400,800			
15th March, 2022	First call (W2)	199,200			
		1,100,000			**1,100,000**
1st Jan., 2023	Balance b/d	1,100,000			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Workings

W1= (1,000,000 × 400) + (4,000 × 200) = TZS 400,800

W2= (1,000,000 - 4,000) × 200 = TZS 192,200

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	300,000	15th Feb., 2022	Bank	400,800
15th Feb., 2022	Share premium	100,000			
15th Feb., 2022	Call in advance	800			
		400,800			**400,800**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	1,000,000	15th Feb., 2022	Application	500,000
			15th Feb., 2022	Allotment	300,000
			15th March, 2022	First call	200,000
		1,000,000			**1,000,000**
			1st Jan., 2023	Balance b/d	1,000,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2022	Balance c/d	**100,000**	15th Feb., 2022	Allotment	**100,000**
			1st Jan., 2023	Balance b/d	100,000

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	Equity share capital	200,000	15th March, 2022	Bank	199,200
			15th March, 2022	Call in advance	800
		200,000			**200,000**

Dr. **Call in advance account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	First call	**800**	15th Feb., 2022	Allotment	**800**

Exercise 6.5

JEJE Ltd. issued to the public for subscription 1,000,000 equity shares of TZS 500 per share at TZS 550 each. The mode of payment was as: TZS 100 at application on 15th April, TZS 300 (including premium) at allotment on 30th June, and TZS 150 at final call on 31st December. All shares were applied and allotted in full. Applicant allotted with 200 shares paid first call money in advance at the allotment stage.

Required:

Open the ledger accounts to record the given transactions. JEJE Ltd.'s financial year ends on 31st March.

Forfeiture of shares

If a shareholder fails to pay the due amount of allotment and/or any call on shares issued by the company, and therefore the call-in arrears remains unpaid for a long time the directors if authorized by articles of association, may cancel the shares issued to those members. The cancellation of the shares is called forfeitures of shares and it has to be handled through an account called "Forfeiture of shares account".

The action of cancelling shares would imply that shares which were earlier recognized as issued shares should be removed from issued share capital account since they are no longer in possession with shareholders. In addition, the amount which was unpaid and treated as calls in arrears will have to be written off since the shareholders will not be called upon to make the payment any more. In that case any share premium recognised should as well be written off from the share premium account.

The accounting treatment for forfeiture of shares will be different for shares that were issued at par, at premium, and at a discount. These treatments are provided below:

Accounting treatments for forfeiture of shares that were previously issued at par

In this case, the company debits the share capital account with the up-to-date called-up capital of the shares forfeited, crediting the forfeiture of shares account. It also credits the calls in arrears account with the amount unpaid in respect of the calls made, debiting the forfeiture of shares account. Alternatively, if the calls in arrears account is not maintained, the treatment is to credit the calls account.

When shares issued at par are forfeited the accounting treatment will be as follows:

1.	Dr. Share capital account	xx	
	Cr. Forfeiture of shares account		xx
	(With the par value of forfeited shares whether received or not, per share up to the time of forfeiture)		
2.	Dr. Forfeiture of shares account	xx	
	Cr. Calls in arrears account		xx
	(With the amount due on forfeited shares)		

Note:

(i) Amount called up = No. of shares × Amount called-up per share

(ii) Amount paid = No. of shares × Amount paid per share

(iii) Amount called but not paid = No. of shares × Amount called-up = (i) – (ii) above

Example 6.8

Zedi, a shareholder, holding 1,000 equity shares of TZS 100 each has paid application money of TZS 20 per share and allotment money of TZS 35 per share, but has failed to pay the first call of TZS 25 per share and second call of TZS 20 per share. His shares were forfeited.

Required: Make the necessary journal entries to record the forfeiture of shares.

Solution

Journal entry

Details	Dr.	Cr.
Equity share capital account (1,000 × 100) Forfeiture of shares account *(Being the par value of forfeited equity shares)*	100,000	 100,000
Forfeiture of shares account (1,000 × 45) Calls in arears account *(Being amount due on forfeited shares)*	45,000	 45,000

Example 6.9

MKWAJUNI Ltd. issued 100,000 shares of TZS 300 each payable as:

- TZS 75 on application,
- TZS 125 on allotment,
- TZS 60 on First call, and
- TZS 40 on second and final call.

90,000 shares were applied for and allotted. All the payments were received with the exception of first call, and second and final call money on 3,000 shares allotted to James. The Board of Directors decided to forfeit these shares.

Required: Prepare journal entry to record transactions relating to forfeiture of shares.

Solution

Journal entry

Details	Dr.	Cr.
Equity share capital account (3,000 × 300) Forfeiture of shares account *(Being the par value of forfeited equity shares)*	900,000	 900,000
Forfeiture of shares account (3,000 × 100) Calls in arears account *(Being amount due on forfeited shares)*	300,000	 300,000

Forfeiture of shares issued at par, but allotted on pro-rata basis

In case, shares applied are more than issued shares, the scheme of allotment is to allot shares in the ratio of shares applied and shares offered for subscription. This is called allotment of shares on pro-rata basis. In case of pro-rata allotment, the excess money received on applications is transferred to share allotment account from share application account. In case a shareholder fails to make payment on allotment and calls money for shares held, the unpaid amount will be calculated as under:

(i) Number of shares applied for allotment

$$= \frac{\text{Total No. of shares applied} \times \text{Shares alloted to defaulter}}{\text{Total shares allotted}}$$

(ii) Excess applications received

$$= \text{Number of shares applied for allotment} - \text{Number of shares allotted}$$

(iii) Excess application money received

$$= \text{Excess number of applied shares} \times \text{money called per share on application}$$

(iii) Amount unpaid on allotment

$$= \text{Amount due on allotment} - \text{Excess application money adjusted towards allotment}$$

Example 6.10

GRACE Company has offered for subscription to the public 100,000 shares of TZS 1,000 each. It has received applications for 150,000 shares. Company has decided to allot shares on prorata basis. Jamila who was alloted 2,000 shares failed to pay allotment money and first call money. Her shares were therefore forfeited. The payment was as follows:

- TZS 200 per share on application.
- TZS 300 per share on allotment.
- TZS 500 per share on call.

Required: Make journal entries to record forfeiture of shares.

Solution

Workings:

$$\text{Number of shares applied} = \frac{\text{Total No. of shares applied} \times \text{Shares alloted to Jamila}}{\text{Total shares allotted}}$$

$$= \frac{150{,}000 \times 2{,}000}{100{,}000} = 3{,}000 \text{ shares}$$

Excess applications received = 3,000 – 2,000 = 1,000

Excess applications amount received = 1,000 × 200 = TZS 200,000

Amount due on allotment = 2,000 × 300 = TZS 600,000

Net unpaid amount on allotment = TZS 600,000 – TZS 200,000 = TZS 400,000

In the books of GRACE Company:

Journal entry

Details	**Dr.**	**Cr.**
Bank account	30,000,000	
Share application account		30,000,000
(Being share application money received for 150,000 shares @ TZS 200 per share)		
Share application account	30,000,000	
Share capital account		20,000,000
Share allotment account		10,000,000
(Being share application money for 100,000 shares transferred to share capital account on their allotment and application money for 50,000 shares transferred to share allotment account)		
Share allotment account	30,000,000	
Share capital account		30,000,000
(Being allotment money due on 100,000 Shares @ TZS 300 per share)		
Bank account	19,600,000	
Calls in arrears	400,000	
Share allotment account		20,000,000
(Being allotment money received on 98,000 shares, and areas recorded in the calls in arears account)		
Share first & final call account	50,000,000	
Share capital account		50,000,000
(Being call money made due on 100,000 Shares @ TZS 500 per share)		

Bank account Calls in arrears Share first and final call account *(Being call money received on 98,000 shares, and areas recorded in the calls in arears account)*	49,000,000 1,000,000	 50,000,000
Share capital account Forfeiture of shares account *(Being 2,000 shares forfeited for non-payment of the allotment & call money)*	2,000,000	 2,000,000
Forfeiture of shares account Calls in arrears account *(Being calls in areas transferred to forfeiture of shares account)*	1,000,000	 1,000,000

Accounting treatments for forfeiture of shares that were previously issued at premium

In case shares are issued at premium and thereafter forfeited there exist two possible situations:

(i) Amount of premium on shares has been received prior to the forfeiture.

(ii) Amount of premium on shares has not been received and it still stands credited to the share premium account.

When share premium amount has been received:

If the amount of premium on forfeited shares has been received by the company prior to the forfeiture of shares, the share premium account will not be affected. In this case the journal entry of forfeiture of shares will be similar to the entry made as if the shares had been issued at par.

Example 6.11

MABO Software Ltd. issued TZS 500,000,000 capital divided into equity shares of TZS 1,000 each. The shares were issued at a premium of TZS 400 per share and were payable as:

- TZS 300 per share on application,
- TZS 700 (including premium) per share on allotment, and
- The balance on call.

All the shares were applied for and duly allotted. All the money was duly received except on 5,000 shares on which the call money was not received. Company decided to forfeit these shares.

Required: Make journal entry to record the forfeiture of 5,000 shares.

Solution

Journal entry

Details	Dr.	Cr.
Equity share capital account (5,000 × 1,000) Forfeiture of shares account *(Being the par value of 5,000 forfeited equity shares)*	5,000,000	 5,000,000
Forfeiture of shares account (5,000 × 400) Calls in arears account *(Being amount due on the 5,000 forfeited shares)*	2,000,000	 2,000,000

When share premium amount has not been received:

When shares are forfeited on which the amount of premium has been made due but has not been received, either wholly or partially, the share premium account will be cancelled by debiting the share premium account, and crediting the forfeiture of shares account. The journal entry will be as follows:

Cancellation of issued share capital for the shares being forfeited	Dr. Share capital account xx Cr. Forfeiture of shares account xx *(With the amount per share which was credited to share capital before cancellation)*
Cancellation of the calls in arrears which shareholders will not be called to make good for those shares being cancelled.	Dr. Forfeiture of shares account xx Cr. Calls in arrears account xx *(With unpaid amount in calls in arrears account on shares being cancelled)*
Cancellation of unpaid share premium on shares being cancelled	Dr. Share Premium account xx Cr. Forfeiture of shares account xx *(With the unpaid share premium if any. This entry is to ensure that unrealised gain is not taken into books of accounts in respect of unpaid premium)*

The balancing figure in the forfeiture of shares account is the amount which was paid on the shares being cancelled before they were forfeited. This amount should be retained by the company and not refunded back to the shareholders. At balance sheet date, the balance in forfeiture of shares account should appear separately under reserves as forfeiture of shares.

Example 6.12

BINAMU Ltd. has an authorized capital of 25,000,000 equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public at TZS 1,100. All shares were subscribed, and the payments were as follows:

- TZS 500 at application stage on 15th January, 2022;
- TZS 400 (including premium) at allotment stage on 15th February, 2022;
- TZS 200 at first call stage on 15th March, 2022.

Shareholders who applied for 2,000 shares failed to pay allotment and first call money on due date. On 15th April, 2022 directors of BINAMU Ltd. decided to forfeit all shares in arrears for allotment and first call money.

Required:

Open the ledger accounts to record the above transactions in books of BINAMU Ltd. for the year ended 31st December, 2022.

Solution

In books of BINAMU Ltd.

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	31st Dec., 2022	Balance c/d	1,098,800
15th Feb., 2022	Allotment	399,200			
15th March, 2022	First call	199,600			
		1,098,800			**1,098,800**
1st Jan., 2023	Balance b/d	1,098,800			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank account	**500,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th April., 2022	Forfeiture of share	2,000	15th Feb., 2022	Application	500,000
30th Dec., 2022	Balance c/d	998,000	15th Feb., 2022	Allotment	300,000
			15th March, 2022	First call	200,000
		1,000,000			**1,000,000**
			1st Jan., 2023	Balance b/d	998,000

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Share capital	300,000	15th Feb., 2022	Bank	399,200
15th Feb., 2022	Share premium	100,000	15th Feb., 2022	Call in arrears	800
		400,000			**400,000**

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th April, 2022	Forfeiture of share	200	15th Feb., 2022	Allotment	100,000
31st Dec., 2022	Balance c/d	99,800			
		100,000			**100,000**
			1st Jan., 2023	Balance b/d	99,800

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	Equity share capital		15th March, 2022	Bank	199,600
		200,000	15th March, 2022	Calls in arrears	400
		200,000			**200,000**

Dr. **Call in arrears account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Febr., 2022	Allotment	800	15th April, 2022	Forfeiture of share	1,200
15th March, 2022	First call	400			
		1,200			**1,200**

Dr. **Forfeiture of share account** Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
15th April, 2022	Call in arrears	1,200	15th April, 2022	Equity share capital	2,000
31st Dec., 2022	Balance c/d	1,000	15th April, 2022	Share premium	200
		2,200			**2,200**
			1st Jan., 2023	Balance b/d	1,000

Exercise 6.6

1. 1,000 shares of TZS 1,000 each were offered to the public at TZS 1,200 each, payable as TZS 200 at application, TZS 500 (including premium) at allotment, and TZS 500 on final call. Applicant with 100 shares did not pay for allotment and final call money and another with 50 shares did not pay for the first call money on the due date. Directors of the company decided to forfeit all shares in arrears for allotment and first call money.
   Required: Open the ledger accounts to record the above forfeiture of shares.

2. The KILI Technology Company Ltd. offered to public for subscription 500,000 equity shares of TZS 200 each at a premium of TZS 50 per share. The amount was payable as under:
   - On application TZS 50 per share,
   - On allotment TZS 120 per share (including premium),
   - On first call TZS 40 per share,
   - On second and final call TZS 40 per share.

Applications were received for all the shares. Allotment was made to all the applicants in full. Rati failed to pay allotment and calls money on 2,000 shares held by her. Also, Mati who was allotted 3,000 shares failed to pay the calls money. Their shares were forfeited.

Required: Make necessary journal entry for the forfeiture only.

Accounting treatments for forfeiture of shares that were previously issued at discount

Discount on issue of shares is a loss to the company. When shares issued at a discount are forfeited for non-payment of the amount due, the discount allowed on such shares is written back. At the time of issue of shares, discount on issue of shares account is debited and when forfeited, this account is credited to cancel the discount allowed on such shares. In this case the following journal entry is made:

1.	Dr. Share capital account	xx	
	Cr. Forfeiture of shares account		xx
	(With the par value of forfeited shares whether received or not, per share up to the time of forfeiture)		
2.	Dr. Forfeiture of shares account	xx	
	Cr. Call in arrears account		xx
	Cr. Discount on issue of shares		xx
	(Being forfeiture of shares originally issued at discount for non-payment of dues)		

Example 6.13

The Greenland Ltd. invited applications for 200,000 shares of TZS 500 each at a discount of 8% payable as follows:

- On application TZS 100 per share
- On allotment TZS 200 per share
- On call TZS 160 per share

Whole of the issue was subscribed and paid for except the calls money on 1,800 shares which were then forfeited by the company.

Required: Make journal entry to record the forfeiture of shares.

Solution

Journal entry

Details	Dr.	Cr.
Equity share capital account (1,800 × 500) Forfeiture of shares account *(Being the par value of 1,800 forfeited equity shares)*	900,000	 900,000
Forfeiture of shares account Call in arears account (1,800 × 160) Discount on issue of shares (1,800 × 40) *(Being amount due on the 1,800 forfeited shares)*	360,000	 288,000 72,000

Re-issue of shares

Shares are forfeited because only a part of the due amount in respect of such shares is received and the balance remains unpaid. On forfeiture, the membership of the original allottee is cancelled. Such shares become the property of the company. Subsequently, the company may decide to resale these shares to the public. Such sale of shares is called 're-issue of shares'. Thus reissue of shares means issue/resale of the shares which were previously forfeited for various reasons. Reissue of shares will involve reinstating the issued share capital at par value to the extent to which other shares are appearing credited to share capital account.

It will involve receipt of money on the reissue based on the reissue price. The price at which forfeited shares can be reissued should be in such a way that, the reissue price plus amount paid per share before cancellation is equal to or more than the nominal value per share. If that is not the case, then it will imply that the shares will be issued at a discount and the company will be compelled to conform to the strict conditions for issuing shares at a discount as laid down in the Companies Act, 2002. The reissue of shares should be handled through "reissue of shares account".

The accounting entries to records the re-issue of shares are as follows:

Reinstating the issued share capital for shares being reissued.	Dr. Reissue of shares account xx Cr. Share Capital account. xx *(With amount to which other shares have been credited to share capital account).*
Cash received on the reissued shares based on the price of reissue	Dr. Bank account xx Cr. Reissue of shares account xx *(Amount received on reissue = Number of shares reissued x reissue price)*
The amount which was paid before the shares were forfeited will have to be transferred from forfeiture of shares account to shares reissue account	Dr. Forfeiture of shares account xx Cr. Reissue of shares account xx *(With the amount which was paid before forfeiture)*
The balancing figure in the reissue of shares account will represent a gain which should be transferred to capital reserve.	Dr. Reissue of shares account xx Cr. Capital reserve xx *(Being a gain realised on re-issue of shares)*

Example 6.14

BINAMU Ltd. has an authorized capital of 25,000,000 Equity shares of TZS 1,000 each, of these 1,000,000 shares were issued to the public at TZS 1,100. All shares were subscribed and the payments were as follows:

- TZS 500 at application stage at 15th January, 2022;
- TZS 400(including premium) at allotment stage on 15th February,2022;
- TZS 200 at first call stage at 15thMarch, 2022.

Shareholders who applied for 2,000 shares failed to pay allotment and first call money on due date. On 1st April, 2022 directors of BINAMU Ltd. decided to forfeit all shares in arrears for allotment and first call money. On 8th April, 2022 all shares so forfeited were reissued for TZS 1,000.

You are required to prepare the necessary ledger accounts in books BINAMU Ltd.

Solution

In books of BINAMU Ltd.

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Jan., 2022	Application	500,000	30th Dec., 2022	Balance c/d	1,100,800
15th Feb., 2022	Allotment	399,200			
15th March, 2022	First call	199,600			
08th April, 2022	Reissue of share	2,000			
		1,100,800			**1,100,800**
1st Jan., 2023	Balance b/d	1,100,800			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb., 2022	Equity share capital	**500,000**	15th Jan., 2022	Bank	**500,000**

Dr. **Equity share capital Account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2022	Forfeiture of share	2,000	15th Feb., 2022	Application	500,000
31st Dec., 2022	Balance c/d	1,000,000	15th Feb., 2022	Allotment	300,000
			15th March, 2022	First call	200,000
			08th April, 2022	Reissue of shares	2,000
		1,002,000			1,002,000
			1st Jan., 2023	Balance c/d	1,000,000

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Feb.2022	Equity share capital	300,000	15th Feb. 2022	Bank	399,200
15th Feb. 2022	Share premium	100,000	15th Feb. 2022	Call in arrears	800
		400,000			400,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2022	Forfeiture of share	200	15th Febr., 2022	Allotment	100,000
31st Dec., 2022	Balance c/d	99,800			
		100,000			100,000
			1st Jan., 2023	Balance b/d	99,800

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th March, 2022	Equity share capital	200,000	15th March, 2022	Bank	199,600
			15th March, 2022	Call in arrears	400
		200,000			**200,000**

Dr. **Call in arrears account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th Febr., 2022	Allotment	800	1st April, 2022	Forfeiture of shares	1,200
15th March, 2022	First call	400			
		1,200			**1,200**

Dr. **Forfeiture of shares account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2022	Call in arrears	1,200	1st April, 2022	Equity share capital	2,000
8th April, 2022	Reissue of shares	1,000	1st April, 2022	Share premium	200
		2,200			**2,200**

Dr. **Reissue of shares account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
8th April, 2022	Equity share capital	2,000	8th April, 2022	Bank	2,000
8th April, 2022	Capital reserve	1,000	8th April, 2022	Forfeiture of shares	1,000
		3,000			**3,000**

Example 6.15

KITOJO Ltd. Invited applications for 20,000 equity shares of TZS 1,000 each payable as follows:

- TZS 200 per share on application 1st April, 2021.
- TZS 300 per share on allotment (including premium) 1st May, 2021.
- TZS 250 per share on first call to be paid 1st June, 2021.
- TZS 350 per share on final to be paid by 1st July, 2021.

Applications were received for 28,000 shares. All applications were allotted shares on the same date on a pro-rata basis, excess amounts received on application being retained towards the allotment money due. As at 15th June, 2021, 600 shares were in arrears for both the allotment and first call money, and a further 200 shares in arrears for the first call only. The directors decided on this date to forfeit all shares in arrears for both allotment money and the call. The amount in arrears for the first call in respect of 200 shares was received together with the second call money. All shares forfeited were reissued on 5th July, 2021 at TZS 850 each as fully paid

You are required to prepare:

(i) Ledger accounts to record the issue of shares;

(ii) Extract balances and show how these transactions could be reflected on the statement of financial position extracted on 31st July, 2021.

Solution

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Application	5,600	31st July, 2021	Balance c/d	22,018
1st May, 2021	Allotment	4,268			
1st June, 2021	First call	4,800			
1st July, 2021	Final call	6,790			
1st July, 2021	Call in arrears	50			
5th July, 2021	Reissue of Shares	510			
		22,018			**22,018**
1st Aug., 2021	Balance b/d	22,018			

Dr. **Application account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st May, 2021	Equity share capital	4,000	1st April, 2021	Bank	5,600
1st May, 2021	Allotment	1,600			
		5,600			**5,600**

Dr. **Allotment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st May, 2021	Equity share capital	4,000	1st May, 2021	Bank	4,268
1st May, 2021	Share premium	2,000	1st May, 2021	Call in arrears	132
			1st May, 2021	Allotment	1,600
		6,000			**6,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th June, 2021	Forfeiture of shares	390	1st May, 2021	Application	4,000
31st July, 2021	Balance c/d	20,000	1st May, 2021	Allotment	4,000
			1st June, 2021	First call	5,000
			1st July, 2021	Final call	6,790
			5th July, 2021	Reissue of Share	600
		20,390			**20,390**
			1st Aug., 2021	Balance b/d	20,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15th June, 2021	Forfeiture of Share	60	1st May, 2021	Allotment	2,000
31st July, 2021	Balance c/d	1,940			
		2,000			**2,000**
			1st Aug., 2021	Balance b/d	1,940

Dr. **First call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st June, 2021	Equity share capital	5,000	1st June, 2021	Bank	4,800
			1st June, 2021	Calls in arrears	200
		5,000			**5,000**

Dr. **Call in arrears account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st May, 2021	Allotment	132	15th June, 2021	Forfeiture of shares	282
1st June, 2021	First call	200	31st July, 2021	Bank	50
		332			**332**

Dr. **Forfeiture of share account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
15thJune, 2021	Call in arrears	282	15thJune, 2021	Share capital	390
5th July, 2021	Reissue of shares	168	15th June, 2021	Share premium	60
		450			**450**

Dr. **Final call account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st July, 2021	Equity share capital	**6,790**	1st July, 2021	Bank account	**6,790**

Dr. **Reissue of shares account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
5th July, 2021	Equity share capital	600	5th July, 2021	Bank	510
5th July, 2021	Capital reserve	78	5th July, 2021	Forfeiture of shares	168
		678			**678**

Statement of financial position extract as at 31st July, 2021

Details	**TZS**
Noncurrent assets	-
Current assets	
Cash at bank	22,018,000
Total assets	**22,018,000**
Equity share capital of TZS 1,000	20,000,000
Share premium	1,940,000
Capital reserve	78,000
Total shareholders' equity	**22,018,000**

Workings:

Amount due on allotment:

20,000 shares at TZS 300	6,000,000
Less: Excess money received at application (800 shares @TZS 200)	1,600,000
Amount due on allotment	4,400,000

Amount in default at allotment:

To be allotted 600 shares, number of shares applied for $= \left(600 \times \frac{28}{20}\right) = 840$

Allotment money on 600 shares	= 180,000
Less: Overpaid at application (240 shares @TZS 200)	= 48,000
Amount defaulted (Call in arrears)	132,000

Cash received on allotment:

Amount due	TZS 4,400,000
Less: Amount defaulted	TZS 132,000
Amount received	TZS 4,268,000

Cash received on first call:

20,000 shares @TZS 250	TZS 5,000,000
Less: 800 shares in arrears @TZS 250	TZS 200,000
Amount received	TZS 4,800,000

Called up capital on forfeited shares:

Application	TZS 200
Allotment	TZS 200
First Call	TZS 250
	TZS 650
Multiply by: Number of forfeited shares	600
To be debited to equity capital	**TZS 390,000**

Call in arrears applicable to forfeited shares:

Defaulted on allotment	TZS 132,000
Defaulted on first call (600 shares x TZS 250)	TZS 150,000
	TZS 282,000

Cash received on second call:

20,000 shared *less* 600 shares @350	TZS 6,790,000
Add: First call money (200 shares @TZS 250)	TZS 50,000
	TZS 6,840,000

Reissue of a part of the forfeited shares

Sometimes not all the forfeited shares are reissued at once, instead, a firm may decide to reissue just part of the forfeited shares at a particular time. In this case, additional calculation is required to identify the amount to be transferred from the forfeiture of shares account. Such amount will be calculated as:

$$\frac{\text{Number of shares re-issued}}{\text{Total number of shares forfeited}} \times \text{Balance in the forfeiture of shares account}$$

In most cases there will be a difference between the credit side totals, and the debit side totals in the re-issue of shares account. If the credit side total is greater than the debit side total, such difference is the profit/gain on re-issue of shares. And it will be transferred to capital reserve.

The accounting treatment for recording the part reissue of forfeited shares is explained using the following example:

Example 6.16

The KINGU Company forfeited 4,000 shares of TZS 500 each on which only application and allotment money of TZS 100 and TZS 200 per share respectively were received. The final call money of the TZS 200 per share was not received and hence necessitated the shares to be forfeited. 300 of the 4,000 forfeited shares are then reissued at TZS 400 per share.

Required:

Open-up ledger accounts to record the forfeiture and reissue of shares.

Solution

Dr. Equity share capital account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
	Forfeiture of Shares	2,000,000		Application	400,000
	Balance c/d	150,000		Allotment	800,000
				Final call	800,000
				Reissue of Share	150,000
		2,150,000			**2,150,000**

Dr. Call in arrears account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
	First call	**800,000**		Forfeiture of shares	**800,000**

Dr. Forfeiture of share account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
	Call in arrears	800,000		Share capital	2,000,000
	Reissue of shares**				
	Balance c/d	90,000			
		1,110,000			
		2,000,000			**2,000,000**
				Balance b/d	1,110,000

Dr. **Reissue of shares account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
	Equity share capital	150,000		Bank	120,000
	Capital reserve*	60,000		Forfeiture of shares	90,000
		210,000			210,000

Note:**

Amount transferred from forfeiture account to re-issue of shares account is calculated as:

$$= \frac{\text{Number of shares re-issued}}{\text{Total number of shares forfeited}} \times \text{Balance in the forfeiture of shares account} \qquad = \frac{300}{4{,}000} \times 1{,}200{,}000 = \text{TZS } 90{,}000$$

Note*:

The amount transferred from the re-issue of shares account to capital reserve is the profit obtained on the shares re-issued.

Exercise 6.7

1. Differentiate between over subscription and under-subscription in the context of issue of shares.
2. BEINAFUU Ltd. offered 60,000 Equity shares of TZS 100 each to the public to raise funds to finance expansion of business. The payments were as follows:
   - TZS 25 on application;
   - TZS 48 on allotment (including premium);
   - TZS 25 on first call; and
   - TZS 12 On second call and final call.

   Applications were received for 73,120 equity shares; applicants for 1,120 equity shares were rejected and their money was refunded. The remaining shares were allotted on prorata basis and the excess application money was retained to reduce money due on allotment.

   All sums due were received except holders of 800 shares failed to pay their sum due on first and second call. Sometimes later those 800 shares were forfeited for non-payment of the first and second calls and 600 of the forfeited shares were reissued as fully paid for TZS 75 each.

   You are required to prepare:

   (a) Ledger accounts to record the given transactions; and

   (b) Statement of financial position extract.
3. 1,000 shares of TZS 1,000 each were offered to the public at TZS 1,200 each, payable as TZS 200 at application, TZS 500 (including premium) at allotment, and TZS 500 at final call stage. Applicant with 100 shares did not pay for allotment and final call money whereas 50 shares did not pay allotment money on the due date. Directors of the company decided to forfeit all shares in arrear for allotment and first call money and reissued the forfeited shares to new shareholder at TZS 650.

   Required: Prepare ledger accounts to record the given transaction on issue of shares.

Redemption of redeemable preference shares

This is the repayment made by the company to the shareholders to repossess the preference shares which were issued as redeemable at a particular stated future date. Share redemption involves an outflow of cash from a company in getting back its own shares so that it may then cancel them. Legally, 'redeeming' means the buying back of shares which were originally issued as 'redeemable shares'. The actual terms of redemption are declared when the shares are issued. In contrast, when shares issued are not stated to be redeemable, if they are subsequently bought back by the company, the company is said to be 'purchasing' its own shares rather than 'redeeming' them. The redemption price will be stated in the terms of issue. The following conditions must be fulfilled for the shares to be redeemed:

(a) There must be authority in the articles of association to redeem such shares;
(b) Shares redeemed must be fully paid up;
(c) The redemption can be financed by proceeds of new issue of equity shares or from profit available for dividends (internal funds) or both;

If the redemption is through internal funds, the amount used or spent on the redemption, that is, the nominal and premium, if any, should be transferred from profits available for dividends to capital redemption reserve fund. These restrictions exist to prevent redemption from reducing a company's capital to the potential disadvantage of creditors.

Advantages to companies for being able to redeem own shares

There are many advantages to a company arising from being able to buy back its own shares. For public companies, the main advantage is that those with surplus cash resources can return some of this surplus cash back to its shareholders by buying back some of their own shares, rather than being pressurized to use such cash in other less economic ways. The main advantage for private companies relates to overcoming problems which occur when shareholders cannot sell their shares on the 'open market'. This means, redemption of shares helps shareholders who have difficulties in selling their shares to realise their value when needed. For both private companies and public companies whose shares are not listed on a stock exchange, may help boost share schemes for employees, as the employees would know that they could dispose off the shares easily.

Accounting for redemption of redeemable preference shares

Accounting for redemption of redeemable preference shares is governed by S.61 of the Companies' Act 2002. The accounting treatments for redemption of preference shares is done in two (2) different ways. That is, accounting treatments when the redemption is financed through proceeds of new issue of equity shares, and accounting treatment when redemption is financed through distributable profits/internal profits. These accounting treatments are described in detail in the next subsections. Accounting entries for redemption of preference shares if redemption is financed by issuing new equity shares are provided as follows:

1. Cancelling redeemable preference share capital being redeemed	Dr. Redeemable preference share capital account xx Cr. Shareholders account xx (With nominal value of share redeemed)
2. If shares are to be redeemed at premium, the premium has to be taken into account	Dr. Premium on redemption xx Cr. Shareholders account xx (With the amount of premium paid to shareholder)
3. Settlement of the liability due to shareholders	Dr. Shareholders account xx Cr .Bank account xx (With the amount due to shareholders i.e. total of 1 and 2 above)
4. Premium on redemption has to be written off from profits available for dividends and not from any statutory reserve or capital reserves	Dr. Profit or loss account xx Cr. Premium on redemption account xx (With the amount of the premium on redemption)

When redemption is financed by a new issue of shares, the accounting treatments for issue of shares discussed in the previous section will apply.

The amount to be received on issue of new shares to finance redemption of redeemable preference shares, should be equal to the nominal value shares plus the premium on redemption of preference shares. For example: If nominal value of redeemable preference share capital is TZS10,000,000 and they are redeemed by new issue of equity shares of TZS 2,000 each, at a premium of 25% then the nominal value of equity share capital to be issued to finance redemption will be equal to $\left(10,000,000 \times \frac{100}{125}\right) =$ TZS 8,000,000.

Hence, the number of equity shares to be issued will be 4,000 in order to raise TZS 10,000,000 needed to redeem preference share.

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Example 6.17

The statement of financial position of MOPA Ltd. as at 30th June, 2021 is given below:

Details	**TZS**
Noncurrent assets	
Property, plant and equipment	375,000,000
Current assets	
Cash at bank	40,000,000
Total assets	**415,000,000**
Shareholders' equity and liabilities	
Equity share capital of TZS 10,000	325,000,000
8% redeemable preference shares of TZS 10,000	30,000,000
Share premium	35,000,000
Profit or loss (Retained earnings)	20,000,000
Current liabilities	
Trade payables	5,000,000
Total Shareholders' equity and liabilities	**415,000,000**

8% redeemable preference shares were redeemed on 1st July, 2021 at a premium of 5%. To finance the redemption, 25,000 Equity shares of TZS 1,000 were issued at TZS 1,300 each. Shareholders of 8% Redeemable preference shares were paid on 21st July, 2021.

You are required to prepare:

(i) Ledger accounts to effect the redemption; and

(ii) Statement of financial position after redemption.

Solution

Dr. **8% redeemable preference share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st July, 2021	Preference shareholders	30,000	1st July, 2021	Balance b/d	30,000

Dr. **Preference shareholders account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
21st July, 2021	Bank	31,500	1st July, 2021	8% redeemable preference share capital	30,000
			1st July, 2021	Premium on redemption	1,500
		31,500			31,500

Dr. **Property, plant and equipment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st July, 2021	Balance b/d	375,000	31st July, 2021	Balance c/d	375,000
1st Aug., 2021	Balance b/d	375,000			

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st July, 2021	Balance b/d	40,000	21st July, 2021	Shareholders	31,500
1st July, 2021	Equity share capital	25,000	31st July, 2021	Balance c/d	41,000
1st July, 2021	Share premium	7,500			
		72,500			**72,500**
1st Aug., 2021	Balance b/d	38,500			

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31stJuly, 2021	Balance c/d	350,000	1st July, 2021	Balance b/d	325,000
			1st July, 2021	Bank	25,000
		350,000			**350,000**
			1st Aug., 2021	Balance b/d	350,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st July, 2021	Balance c/d	42,500	1st July, 2021	Balance b/d	35,000
			1st July, 2021	Bank	7,500
		42,500			**42,500**
			1st Aug., 2021	Balance b/d	42,500

Dr **Profit or loss account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st July, 2021	Premium on redemption	1,500	1st July, 2021	Balance b/d	20,000
31st July, 2021	Balance c/d	18,500			
		20,000			**20,000**
			1st Aug., 2021	Balance b/d	18,500

Dr **Premium on redemption account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st July, 2021	Preference shareholders	**1,500**	31st July, 2021	Profit and loss	**1,500**

Dr. **Trade payables account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st July, 2021	Balance c/d	**5,000**	1st July, 2021	Balance b/d	**5,000**
			1st Aug., 2021	Balance b/d	5,000

MOPA Ltd.

Statement of financial position as at 31st July, 2021

Details	TZS
Noncurrent assets	
Property, plant and equipment	375,000,000
Current assets	
Cash at bank	41,000,000
Total assets	**416,000,000**
Shareholders equity and liabilities	
Equity share capital of 10,000	350,000,000
Share premium	42,500,000
Profit or loss account	18,500,000
Current liabilities	
Creditors	5,000,000
Total shareholders' equity and liabilities	**416,000,000**

Accounting treatments when redemption is not financed by new issue of shares

The redemption of redeemable preference shares can be financed by company's internal funds. Funds which can be used to redeem redeemable preference shares under this mode of financing includes general reserves, profit and loss account. Any other reserve may also be used, as long as the reserve is available for distribution. Under this method, the firm will finance the redemption through internal funds. The concern of the law is to ensure that the capital which is being cancelled is replaced by a fund which will not be subject to manipulation by the company and hence jeopardize the interest of creditors. The funds to be maintained in place of capital being cancelled is called ''Capital Redemption Reserve Fund'' (CRRF) which will be equal to the amount ultimately paid out to preference shareholders on redemption. The amount paid out to shareholders should include the nominal value and the associated premium on redemption.

Accounting entries for redeeming preference shares when redemption is not financed by new issue of shares:

S/N	Transaction	Accounting treatment
	Cancelling redeemable preference share capital being redeemed	Dr. Redeemable preference share capital account xx Cr. Shareholders account xx (With nominal value of share redeemed)
	If shares are to be redeemed at premium, the premium has to be taken into account.	Dr. Premium on redemption xx Cr. Shareholders account xx (With the amount of premium paid to shareholder)
	Settlement of the liability due to shareholders.	Dr. Shareholders account xx Cr. Bank account xx (With the amount due to shareholders i.e. total of 1 and 2 above)
	In order to ensure that the interests of creditors are not jeopardized through reduction of capital amount applied i.e. nominal value plus premium on redeemed shares should be transferred from profits available for dividends to capital redemption reserve fund.	Dr. Profit or loss account or other reserve xx Cr. CRRF account xx (With the nominal value plus premium on shares being redeemed)
	Premium on redemption has to be written off. The law is silent on redemption through internal funds as opposed to issue of shares. This means the premium on redemption can be written off from any reserve whether statutory or not.	Dr. Share premium or any reserves account xx Cr. Premium on redemption account xx (With the amount of the premium on redemption)

The balance in the CRRF, according to the Companies Act may be used only in connection with capital reduction or for issuing bonus shares. The use of the balance in CRRF to issue bonus shares is subject to stringent limitations. Bonus issue from the fund is limited to the nominal value of the shares issued to redeem preference shares i.e. only to the extent that the redemption is financed through new issue. Also, the amount that can be applied is limited to the nominal value of shares issued to redeem preference shares. The implication is, where the redemption is wholly financed through internal sources, the balance in CRRF will not be available for bonus issue.

Example 6.18

The following is the statement of financial position of MAMBA Ltd. as at 31st March, 2021.

Details	**TZS "000"**
Non-current assets	
Property, plants and equipment	1,600,000
Current assets	
Cash and bank	400,000
Total assets	**2,000,000**
Equity	
Share capital and reserves:	
120,000 equity shares of TZS 10,000 each	1,200,000
20,000 10% redeemable preference shares of TZS 10,000 each fully paid	200,000
Share premium	20,000
Capital redemption reserve fund	70,000
Retained earnings	420,000
Current liabilities	
Accounts payable	90,000
Total equity and liabilities	**2,000,000**

MAMBA Ltd., decided to redeem their preference shares as on 1st April, 2021. The redemption was to be at a premium of 5% on fully paid shares which were due for redemption. The capital redemption reserve funds appearing in the statement of financial position is the reserve brought into account being the result of redemption which took place in the year ended 31st March, 2020. The redemption of redeemable preference shares were financed through internal funds. The redemption was duly carried out as planned.

You are required to prepare:

(i) Ledger accounts to effect the redemption; and

(ii) Statement of financial position as 30th April, 2021.

Solution

Dr. 10% Redeemable preference share capital account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Shareholders	**200,000**	1st April, 2021	Balance b/d	**200,000**

Dr. 10% Redeemable preference shareholders' account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Bank	210,000	1st April, 2021	10% redeemable preference capital	200,000
			1st April, 2021	Premium on redemption	10,000
		210,000			**210,000**

Dr. Property, plant and equipment account Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Balance b/d	**1,600,000**	30th April, 2021	Balance c/d	**1,600,000**
1st May, 2021	Balance b/d	1,600,000			

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Balance b/d	400,000	1st April, 2021	Preference shareholders	210,000
			30th April, 2021	Balance c/d	190,000
		400,000			**400,000**

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS TZS "000"	Date	Details	TZS TZS "000"
30th April, 2021	Balance c/d	**1,200,000**	1st April, 2021	Balance b/d	**1,200,000**
			1st May, 2021	Balance b/d	1,200,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS TZS "000"	Date	Details	TZS TZS "000"
1st April, 2021	Premium on redemption	10,000	1st April, 2021	Balance b/d	20,000
30th April, 2021	Balance c/d	10,000			
		20,000			**20,000**
			1st May, 2021	Balance b/d	10,000

Dr. **Retained earnings account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st April, 2021	Capital redemption reserve fund	210,000	1st April, 2021	Balance b/d	420,000
30th April, 2021	Balance c/d	210,000			
		420,000			**420,000**
			1st May, 2021	Balance b/d	210,000

Dr. **Capital redemption reserve fund account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
30th April, 2021	Balance c/d	280,000	1st April, 2021	Balance b/d	70,000
			1st April, 2021	Retained earnings	210,000
		280,000			**280,000**
			1st May, 2021	Balance b/d	280,000

Dr **Trade payables account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
30th April, 2021	Balance c/d	**90,000**	1st April, 2021	Balance b/d	**90,000**
			1st May, 2021	Balance c/d	90,000

MAMBA Ltd. statement of financial position as at 30th April 2021 after redemption

Details	TZS "000"
Non-current assets	
Property, plants and equipment	1,600,000
Current assets	
Cash and bank	190,000
Total assets	**1,790,000**
Equity and liabilities	
Share capital and reserves:	
120,000 equity shares of TZS 10,000 each	1,200,000
Share premium	10,000
Capital redemption reserve fund	280,000
Profit and loss account	210,000
Current liabilities	
Account payables	90,000
Total equity and liabilities	**1,790,000**

Accounting treatments when redemption is financed through combination of proceeds of new issue of equity shares and internal funds

If the redemption is financed through the combination of financing; partly through new issue of equity shares and partly through internal sources, then the use of capital redemption reserve fund to finance issue of bonus shares will be limited to the nominal value of shares issued for redemption of preference shares. The bonus issue should be handled through an account known as "Bonus share issue account".

Example 6.19

The redeemable preference shares of Kanono Ltd. were redeemed on 1st January, 2022 at a premium of 5%. To finance the redemption 100,000 new equity shares of TZS 10,000 were issued at TZS 12,000 each and the balance through internal funds. The company issued bonus shares of one equity share for every five (5) shares held before redemption, the company wants to maximize the use of CRRF. Preference shareholders were paid their money on 31st January, 2022.

The statement of financial position of Kanono Ltd. as at 31st December 2021 is given below:

Details	**TZS “000”**
Non-current assets	
Property, plant and equipment	18,000,000
Current assets	
Cash at bank	12,000,000
Total Assets	**30,000,000**
Shareholders equity and liabilities	
Equity shares of TZS 10,000 each	10,000,000
8% redeemable preference shares of TZS 10,000	6,000,000
Share premium	4,000,000
Retained earnings	8,000,000
Liabilities	
Account payable	2,000,000
Total equity and liabilities	**30,000,000**

Required:
Open the ledgers accounts to effect the redemption; and a statement of financial position after redemption.

Solution

Dr. **8% redeemable preference shares account** **Cr.**

Date	**Details**	**TZS TZS “000”**	**Date**	**Details**	**TZS TZS “000”**
1st Jan., 2022	Preference shareholders	6,000,000	1st Jan., 2022	Balance b/d	6,000,000

Dr. **Preference shareholders account** **Cr.**

Date	**Details**	**TZS TZS “000”**	**Date**	**Details**	**TZS TZS “000”**
31st Jan., 2022	Bank	6,300,000	1st Jan., 2022	10% redeemable preference shares	6,000,000
			1st Jan., 2022	Premium on redemption	300,000
		6,300,000			**6,300,000**

Dr. **Property, plant and equipment account** Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Balance b/d	**18,000,000**	31st Jan., 2022	Balance c/d	**18,000,000**
1st Feb., 2022	Balance b/d	18,000,000			

Dr. **Bank account** Cr.

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Balance b/d	12,000,000	1st Jan., 2022	Shareholders	6,300,000
1st Jan., 2022	Equity share capital	1,000,000	1st Jan., 2022	Balance c/d	6,900,000
1st Jan., 2022	Share premium	200,000			
		13,200,000			**13,200,000**
1st Feb., 2022	Balance b/d	6,900,000			

Dr. **Equity share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Jan., 2022	Balance c/d	13,000,000	1st Jan., 2022	Balance b/d	10,000,000
			1st Jan., 2022	Bank	1,000,000
			1st Jan., 2022	Bonus issue	2,000,000
		13,000,000			**13,000,000**
			1st Feb., 2022	Balance b/d	13,000,000

Dr. **Share premium account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Premium on redemption	240,000	1st Jan., 2022	Balance b/d	4,000,000
1st Jan., 2022	Bonus issue	1,000,000	1st Jan., 2022	Bank	200,000
31st Jan., 2022	Balance c/d	2,960,000			
		4,200,000			**4,200,000**
			1st Feb., 2022	Balance b/d	2,960,000

Dr. **Capital redemption reserve fund account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Bonus issue Account	1,000,000	1st Jan., 2022	Retained earnings	5,040,000
31st Jan., 2022	Balance c/d	4,040,000			
		5,040,000			**5,040,000**
			31st Jan., 2022	Balance b/d	4,040,000

Dr. **Retained earnings account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Premium on redemption	60,000	1st Jan., 2022	Balance b/d	8,000,000
1st Jan., 2022	Capital redemption reserve fund	5,040,000			
31st Jan., 2022	Balance c/d	2,900,000			
		8,000,000			**8,000,000**
			31st Jan., 2022	Balance b/d	2,900,000

Dr **Premium on redemption Account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Preference shareholders	300,000	1st Jan., 2022	Share premium	240,000
			1st Jan., 2022	Retained earnings	60,000
		300,000			300,000

Dr **Trade payables account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Jan., 2022	Balance c/d	2,000,000	1st Jan., 2022	Balance b/d	2,000,000
			1st Feb., 2022	Balance b/d	2,000,000

Dr **Bonus issue account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2022	Equity share capital	2,000,000	1st Jan., 2022	CRRF account	1,000,000
			1st Jan., 2022	Share premium	1,000.000
		2,000,000			2,000,000

Kanono Ltd.

The statement of financial position as at 31st January, 2022

Details	TZS ”000”
Non-current assets	
Property, plant and equipment	18,000,000
Current assets	
Cash at bank	6,900,000
Total assets	**24,900,000**
Shareholders equity and liabilities	
Equity share capital of TZS 10,000 each	13,000,000
Capital Redemption Reserve Fund	4,040,000
Share premium	2,960,000
Retained earnings	2,900,000
Current liabilities	
Account payable	2,000,000
Total equity and liabilities	**24,900,000**

Workings 1:

Details	**TZS “000”**
8% redeemable preference shares redeemed	6,000,000
Amounts from new issues of equity shares $(100,000 \times 12,000)$	1,200,000
Amount financed from internal funds	4,800,000

Workings 2:

Amount transferred from profit and loss account to CRRF account is equal to nominal value plus premium on redeemed preference shares financed from internal funds. $= 4,800,000 \times 1.05 = 5,040,000$

Workings 3:

If one (1) bonus share is given to every five (5) shares held:

Number of bonus equity shares $= (1,000,000 \div 5) = 200,000$ equity shares.

Nominal value of bonus issue $= 200,000 \times 10,000$

= TZS 2,000,000,000

Workings 4:

Maximum amount from CRRF to finance bonus issue is equal to the nominal value of new equity shares issued to finance redemption, that is, TZS 1,000,000,000. The remaining amount is written off from share premium.

Workings 5:

Premium on redemption (TZS 6,000,000 ×5%)	= TZS 300,000
Less: From distributable profit (TZS 1,200,000 ×5%)	= TZS 60,000
Balance from share premium	= TZS 240,000

Redemption of debenture

A debenture is an acknowledgement of a loan to a company. It is usually issued under the company's seal (i.e. is an official document issued by the company, similar to a share certificate) and bears a fixed rate of interest. However, unlike shares, which normally depend on profits out of which to issue dividends, debenture interest does not depend on profit, instead it should be paid whether profits are made or not.

A debenture may be redeemable, that is, repayable at or by a specified date. Conversely, debentures may be irredeemable, that is, debenture holders will be repaid their capital when the company is eventually liquidated.

People lending money to companies in the form of debentures will obviously be interested in how safe their investment will be. In the case of some debentures, the debenture holders are given the legal right that on certain happenings they will be able to take control of specific assets, or of the whole of the company's assets. They can sell the assets and recoup the amount due under their debentures, or deal with the assets in ways specified in the deed under which the debentures were issued. These debentures are known as being secured against the asset, and the term mortgage debenture is often used to describe them. Other debentures carry no prior right to control the assets under any circumstances. These are known as simple or naked debentures.

Redemption of debentures involves the repayment of these debentures by the company to the debenture holders. In the process of redemption, the companies discharge its liability to debenture holders and remove it from the statement of financial position. The method of redemption of each category of debentures will be expressly stated in a debenture trust deed. There are five (5) common methods in which redemption of debentures can take place. These methods have different accounting treatments as well. The methods are:

(a) Payment in lump sum;
(b) Payment in instalments;
(c) Purchase in open market;
(d) Redemption by sinking fund; and
(e) Conversion into shares or new debentures.

Payment in lump sum

This method, as the name suggests is a one-time payment method. Here the company will repay the whole amount in one lump sum payment to the debenture holders. The amount and the date of the payment will be according to the terms of issue. Since the company knows the date of the repayment in advance they can plan their finances accordingly. So they make provisions and necessary arrangements to pay the debenture holders when due. Thus, the company sets up a special account known as the Debenture Redemption Reserve (DRR). This debenture redemption reserve is a capital reserve account. It is funded by the divisible profits of each year, that is, a portion of the profits are set aside every year for this purpose. This account can only be utilized for the purpose of redemption of debentures and not for any other purpose.

The accounting treatment

S/N	Journal entries		
1.	**The entries passed in the first year of the debentures is as follows:**		
	Dr. Profit or loss appropriation account	xx	
	Cr. Debenture redemption reserve account		xx
	(Being appropriation of profit to DRR account)		
2.	Dr. DRR investment account	xx	
	Cr. Bank account		xx
	(Being amount invested in securities)		
3.	**The entries passed in the subsequent years are as follows:**		
	Dr. Bank account	xx	
	Cr. Interest on DRR investment account		xx
	(Being interest received on investment made)		
4.	Dr. Interest on DRR investment account	xx	
	Cr. DRR account		xx
	(Being interest credited to DRR account)		
5.	Dr. Profit or loss appropriation account	xx	
	Cr. DRR account		xx
	(Being appropriation of profit to DRR account)		
6.	Dr. DRR investment account	xx	
	Cr. Bank account		xx
	(Being amount invested in securities)		
7.	**In the final year:**		
	Dr. Bank account	xx	
	Cr. DRR account		xx
	(Being investment sold)		

8.	Dr. Profit or loss appropriation account Cr. DRR account *(Being amount of profit transferred to DRR)*	xx	 xx
9.	Dr. DRR account Cr. General reserve account *(Profit on sale of investment)*	xx	 xx

Payment in instalments

This method is also known as the drawing of lots method. Under this method, usually redemption of debentures is paid in instalments on the particular date during the life time of debentures. The total amount of debenture liability is being divided by the total number of years. It must be noted that the debentures to be redeemed are recognised by drawing the required number of lots out of the debentures outstanding for the payment. Here the company will start redeeming debentures in lots or instalments from one particular year as agreed by the terms of issue. The accounting treatments for this method are provided bellow:

The accounting treatment

S/N	Journal entries		
1.	If the debentures are redeemed from profits Dr. Profit and loss appropriation account Cr. DRR Account	 xx	 xx
2.	Dr. Debentures account Cr. Debenture holders account	xx	 xx
3.	Dr. Debenture holders account Cr. Bank account	xx	 xx

Purchase in open market

When an enterprise buys its own debentures in the market for the aim of cancellation, such an act of buying and cancelling the debentures comprises redemption of debentures by purchase in the open market. In this method, the company will buy its debentures from the open market and then immediately cancel them. Companies can buy the debentures at a discount that can make additional benefits/profits, or even at a premium. In this way the company can defer the redemption till the purchase price is favourable to them. A sum, equal to the cash paid on redemption is transferred from the profit and loss appropriation account to the credit of the debenture redemption reserve account. The sum paid will be credited to the bank account and debited to the debentures account. Any discount (or profit) on purchase will be transferred to a reserve account. Any premium (or loss) on purchase will be deemed to come from a reserve account, or if such account does not exist, or if it is insufficient, then it will be deemed to come out of the share premium account. In absence of reserve account or share premium account, any loss will be transferred to the profit and loss appropriation account. Purchase in open market would not be favourable if the debentures had to be redeemed at premium. Although, the purchase can be made it would still be favourable if the premium paid was not as high as the premium to be paid on the redemption date.

The accounting treatment

S/N	Journal entries		
1.	When debentures are purchased at a premium		
	Dr. Debentures account	xx	
	Dr. Loss on redemption account		xx
	Cr. Bank account		xx
2.	Dr. Retained earnings account	xx	
	Cr. Loss on redemption account		xx
3.	When debentures are purchased at a discount		
	Dr. Debentures account	xx	
	Cr. Profit on redemption account		xx
	Cr. Bank account		xx
4.	Dr. Profit on redemption account	xx	
	Cr. Capital Reserve		xx

When debentures are redeemed at a premium

The funds with which the premium is paid should be taken from the share premium account. If this does not exist, or when the premium on redemption paid is more than the balance on the share premium account, then any part not covered by a share premium account is deemed to come from profit and loss appropriation account. The balance on the debenture redemption reserve account is increased by the nominal value of the debentures redeemed each year. Any element of the redemption sourced by the share premium account is entered as a debit to that account and is not included in the debenture redemption reserve. When the whole issued of debentures has been redeemed, the balance on the debenture redemption reserve account is transferred to the credit of a general reserve account. Hence, this will be accumulation of undistributed profits.

Example 6.20

The following is a statement of financial position of SIGMA Ltd. for the year ended 31st December, 2020.

SIGMA Ltd.

Statement of financial position as at 31st December, 2020

Details	**TZS**
Non-current assets	12,900,000
Current assets	
Bank	3,400,000
Total assets	**16,300,000**
Equity and liabilities	
Equity share capital	10,000,000
Debenture redemption reserve	-
10% Debentures	2,000,000
Retained earnings	4,300,000
Total equity and liabilities	**16,300,000**

Required:

Prepare ledger accounts to record redemption of debenture by drawing out of profits method, assuming that TZS 400,000 nominal value debentures were redeemed on 31st December, 2021, at a premium of 20%.

Solution

Dr. **Non-current assets account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2021	Balance b/d	**12,900**	31st Dec., 2021	Balance c/d	**12,900**
1st Jan., 2022	Balance b/d	12,900			

Dr. **Bank account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2021	Balance b/d	3,400	31st Dec., 2021	Debenture holders	480
			31st Dec., 2021	Balance c/d	2,920
		3,400			**3,400**
1st Jan., 2022	Balance b/d	2,920			

Dr. **Share capital account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	Balance c/d	**10,000**	1st Jan., 2021	Balance b/d	**10,000**
			1st Jan., 2022	Balance b/d	10,000

Dr. **Debenture redemption reserve account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	Balance c/d	**400**	31st Dec., 2021	Retained earnings	**400**

Dr. **10% Debentures account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	10% Debenture holders	400	1st Jan., 2021	Balance b/d	2,000
31st Dec., 2021	Balance c/d	1,600			
		2,000			**2,000**
			1st Jan., 2022	Balance b/d	2,000

Dr. **Premium on redemptions account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	Debenture redemption reserve	**80**	1st Jan., 2021	Retained Earnings	**80**

Dr. **Profit or loss account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	Debenture redemption reserve	400	1st Jan., 2021	Balance b/d	4,300
	Premium on redemption	80			
31st Dec., 2021	Balance c/d	3,820			
		4,300			**4,300**
			1st Jan., 2022	Balance b/d	3,820

Dr. **10% Debenture holder's account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
31st Dec., 2021	Bank	480	31st Dec., 2021	Debentures	400
			31st Dec., 2021	Premium on redemption	80
		480			**480**

SIGMA Ltd. statement of financial position as 31st December 2021 after redemption

Details	TZS "000"
Assets	
Non-current assets	12,900
Current assets	
Bank	2,920
Total assets	**15,820**
Equity and liabilities	
Share capital	10,000
Debenture redemption reserve	400
10% Debentures	1,600
Profit or loss	3,820
Total equity and liabilities	**15,820**

Conversion of debentures into shares or new debentures

An enterprise can recover its debentures by transforming them into a new class of debentures or shares. If debenture holders find that the offer is useful to them, they can exercise their right of transforming their debentures into new class of debentures or shares. It should be noted that this method is applicable only for convertible debentures. A company may opt not to pay the debenture holders at the time of redemption, instead, it can convert the debentures into a new class of debentures or even equity shares. Such debentures are known as convertible debentures. The new debentures or shares can be issued at par, premium or even discount. The accounting treatment for these scenarios are provided as follows

The accounting treatment

S/N	Journal entries		
1.	**Debentures converted to a new class of debentures**		
	Dr. 8 % Debentures account (old)	xx	
	Cr. 9% Debentures account (New)		xx
	(Being debentures converted to new debentures)		
2.	**Debentures converted to equity shares**		
	Dr. 8 % Debentures account (old)	xx	
	Cr. Equity share capital		xx
	(Being debentures converted to new shares)		

Redemption by sinking fund method

Under this method fund will be created by annual appropriation from annual profit and the same will be invested to selected type of investments which will be managed by the trustee. The return from these investments will be reinvested until sufficient amount to redeem those debentures is built up. The fund will result from annual appropriation of profits and later invested on the trustee managed investments. Three special accounts have to be opened to cater for: fund creation; investment; and redemption. These accounts are:

(i) Sinking fund account to cater for the build-up of the fund;
(ii) Sinking fund investment account to cater for amount of funds which have been invested; and
(iii) Debenture redemption account for the ascertainment of a gain or loss on each redemption.

Accounting entries for redemption of debentures using sinking fund method

S/N	Detail	Accounting treatment
1.	When making annual appropriation of profit	Dr. Profit or loss appropriation account xx Cr. Sinking fund account xx *(With the amount set aside from profit and loss account)*
2.	When investing funds which were set aside	Dr. Sinking fund investments account xx Cr. Bank/Cash account xx *(With money invested pertaining to the to the sinking fund)*
3.	When income (return) is received on the investment made	Dr. Bank account xx Cr. Sinking fund account xx *(With the amount of income received)*
4.	When the received income is reinvested	Dr. Sinking fund investment account xx Cr. Bank account xx *(With the amount of income received and reinvested)*
5.	When redeeming the debentures when they mature	Dr. Debentures account xx Cr. Debenture redemption account xx *(With the nominal value of debenture being cancelled)*
6.	When making settlement to debenture holders	Dr. Debenture redemption account xx Cr. Bank account xx *(With amount due to debenture holders being redeemed)*
7.	If debentures have been redeemed at more than the nominal value i.e. at premium	Dr. Sinking fund account xx Cr. Debenture redemption account xx *(With premium on redemption)*

8.	If redeemed at less than nominal value i.e. discount or profit	Dr. Debenture redemption account xx Cr. Sinking fund account xx *(With the amount of discount on redemption)*
9.	To provide for the funds to be used to redeem the debentures, some investments which were established have to be sold in the process.	
10.	Upon sale of the investments	Dr. Bank account xx Cr. Sinking fund investment account xx *(With sales proceeds from investment sold)*
11.	If there is profit on sale	Dr. Sinking fund investment account xx Cr. Sinking fund account xx *(With the differences between cost and realisable value when sale proceeds are more than costs).*
12.	If there is loss on sale	Dr. Sinking funds account xx Cr. Sinking fund investment account xx *(With the differences between cost and realisable value when sale proceeds are less than costs).*

Note:

If debentures have been redeemed at a discount or premium, there will be a balancing figure in the debenture redemption account. The balance shall be a loss or gain on the redemption of the debentures. The gain or loss in the debenture redemption account will be transferred to sinking fund account.

When all debentures have been redeemed and all sinking funds investment have been realised, the balance in the sinking fund account will be transferred to the general reserves.

Example 6.21

TAALUMA Plc. issued five (5) years 10% debenture with a nominal value of TZS 100 each on 1st January, 2016. According to the terms of agreement, an amount had to be set out from profit and invested annually. The balances as on 1st January, 2021 were as follows:

10% debenture account	TZS 1,000,000,000.
Sinking fund account	TZS 900,000,000
Sinking fund investment account	TZS 900,000,000

The following details occurred during the year ended 31st December, 2021.

(a) TZS 20,000,000, investment income was received on 5th January, 2021, the same was invested immediately. Half year's debenture interest was paid on 30th June, 2021;

(b) On 31st December 2021, redeemed TZS 20,000,000 of debenture by selling investments which cost TZS 100,000,000 for TZS 90,000,000 to finance this redemption;

(c) The company set aside TZS 15,000,000 from profit, this amount was not invested;

(d) On 31st December 2021, the company paid final interest and redeemed all debentures the remaining debentures at TZS 105. All investments were sold for TZS 1,000,000,000.

Required: Prepare all the necessary ledger accounts to effect the given transactions in the books of TAALUMA Plc.

Solution

Dr. **10% Debenture account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2021	Debenture redemption	20,000	1st Jan., 2021	Balance b/d	1,000,000
31st Dec., 2021	Debenture redemption	980,000			
		1,000,000			**1,049,000**

Dr. **Debenture redemption account** **Cr.**

Date	Details	TZS "000	Date	Details	TZS "000
5th Jan., 2021	Bank	16,000	5th Jan., 2021	10% Debenture	20,000
5th Jan., 2021	Sinking fund	4,000	31st Dec., 2021	Debenture	980,000
31st Dec., 2021	Bank	1,029,000	31st Dec., 2021	Sinking fund	49,000
		1,049,000			**1,049,000**

Dr. **Sinking fund investment account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
1st Jan., 2021	Balance b/d	900,000	5th Febr., 2021	Bank *(sales)*	90,000
5th Jan., 2021	Bank *(Income)*	20,000	5th Feb., 2021	sinking fund - *(loss)*	10,000
30th June., 2021	Sinking fund *(profit)*	180,000	30th June., 2021	Bank *(sales)*	1,000,000
		1,100,000			**1,100,000**

Dr. **Debenture interest account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
30th June, 2021	Bank	50,000	31st Dec., 2021	Profit and loss	100,000
31st Dec., 2021	Bank	50,000			
		100,000			**100,000**

Dr. **Sinking fund account** **Cr.**

Date	Details	TZS "000"	Date	Details	TZS "000"
30th June, 2021	Sinking fund investment	50,000	31st Dec., 2021	Balance b/d	900,000
31st Dec., 2021	Sinking fund investment	49,000	31st Dec., 2021	Bank	20,000
31st Dec., 2021	General reserves	1,020,000	31st Dec., 2021	Debenture redemption	4,000
			31st Dec., 2021	Profit or loss	15,000
			31st Dec., 2021	Sinking fund inv.	180,000
		1,119,000			**1,119,000**

Presentation of financial statements of a company

An overview of financial statements

Financial statements of a company are those statements prepared by a company at the end of a financial year. The purpose of providing financial statements is to provide a clear picture of the company's financial performance and financial position to its management, owners, and all users of such accounting information. The Companies Act (2002) requires every company to prepare financial statements at the end of each accounting period. The financial statements of a company comprises of a statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity, statement of cash flows and notes which comprises a summary of significant accounting policies and other explanatory notes. Each component of the financial statements shall be identified clearly. In addition, the following information shall be displayed prominently, and repeated when it is necessary for a proper understanding of the information presented:

(a) The name of the reporting entity;
(b) Whether the financial statements cover the individual entity or a group;
(c) The financial position date or the period covered by the financial statements;
(d) The presentation currency example Tanzania shillings; and
(e) The level of rounding used in presenting amounts in the financial statements.

Financial statements shall be presented at least annually. When an entity's statement of financial position date changes and annual financial statements are presented for a period longer or shorter than one year, an entity shall disclose, in addition to the period covered by the financial statements, the reason for using a longer or shorter period. Financial statements should be made available to users within a reasonable period after the statement of financial position date. Companies should be in a position to issue its financial statements within six months of the statement of financial position date.

Components of financial statements of a company

Statement of financial position

The statement of financial position is also known as balance sheet. Items presented in the statement of financial position include assets, liabilities and owners' equity of a business at a point in time. Assets are economic resources controlled by an entity as a result of past event. Example of assets include cash, motor vehicles, buildings, land, and inventories. Liability is an obligation or debt owed by business to outsiders arising from past transactions or events, the settlement of which may result into an outflow of cash or use of cash. Owners' equity is the net worth of the owners claim against the business; it is the residual value of the business firm after all liabilities have been deducted from its assets. Assets and liabilities are classified into current and non-current.

Assets

An asset shall be classified as current if:

(a) It is expected to be realised in, or is intended for sale or consumption in the entity's normal operating cycle;

(b) It is expected to be realised within twelve months after the balance sheet date; and

(c) It is cash or cash equivalent.

All other assets shall be classified as noncurrent.

Liabilities

A liability shall be classified as current if:

a) It is expected to be settled in the entity's normal operating cycle;

b) It is held primarily for the purpose of being traded;

c) It is due to be settled within twelve months after the balance sheet date; and

d) The entity does not have an unconditional right to defer settlement of the liability for at least twelve months after the balance sheet date.

All other liabilities shall be classified as noncurrent.

Income Statement/ Statement of profit or loss

Income statement is also referred to as the statement of profit or loss. It shows revenue and expenses related to the company in a particular accounting period. Revenue can be defined as the amount of income generated by a business through the sale of goods and services. Expenses are the cost of doing business. It covers everything which is costing company money to generate revenue. The expenses come after the revenue in the income statement of a business and net profit or loss is ascertained. Statement of profit and loss appropriation is prepared to show how the company appropriates or distributes the profit earned during the year. It is an extension of statement of profit and loss. It is prepared after profit and loss account at the end of every financial year.

Example 6.22

The MBL Company Ltd. operates its activities in small town near Mtwara. The following trial balance relate to MBL Company Ltd. as at 31st December, 2021.

Details	Dr.	Cr
100,000 equity shares of TZS 1,000@ fully paid		100,000,000
8% Redeemable preference shares TZS 1,000@ fully paid		100,000,000
Retained profit		70,000,000

10% Debenture		50,000,000
Sales		585,000,000
Purchases	200,000,000	
Opening inventory 1st January 2021	20,000,000	
Bank and cash	20,000,000	
Motor lorries – at cost	360,000,000	
Accumulated depreciation		110,000,000
Freehold property	165,000,000	
Repairs expenses	22,000,000	
Drivers' wages	60,000,000	
Maintenance wages	15,000,000	
Parts and consumables	70,000,000	
Licenses and insurance	20,000,000	
Administration salaries	20,000,000	
Sundry administrative expenses	12,000,000	
Drivers' overnight expenses	6,000,000	
Directors' salaries	25,000,000	
Total	**1,015,000,000**	**1,015,000,000**

Additional information:

(i) Drivers' claims for TZS 150,000 relating to overnight expenses had not been taken into account;

(ii) Closing inventory as at 31st December, 2021 had a value of TZS 33,000,000;

(iii) It was estimated that, there was a prepayment of TZS 4,000,000 with regard to licenses and insurance at the end of the year 2021;

(iv) Depreciation of TZS 62,500,000 is to be charged on vehicles for the year to 31st December, 2021;

(v) Income Tax was estimated at TZS 22,400,000.

(vi) There is a proposed dividend of TZS 20,000,000;

(vii) The appropriation of after-tax profit for year ended 31st December, 2021 was as follows:

- MB Company Ltd. management proposed a dividend of TZS 200 for each paid up equity share.
- Dividend on the 8% preference shares has not yet been paid up to the balance sheet date.
- On 31st December, 2021 TZS 2,000,000 were transferred to general reserves

You are required to prepare:

(i) MBL's income statement for the year ended 31st December, 2021.

(ii) A statement of financial position as at 31st December, 2021.

Solution

MBL Company Ltd.

Income statement for the year ended 31st December, 2021

Details	**TZS**	**TZS**	**TZS**
Sales			585,000,000
Less: Cost of goods sold			
Opening inventory		20,000,000	
Add: Purchases		200,000,000	
Goods available for sale		220,000,000	
Less: closing inventory		33,000,000	187,000,000
Gross profit			**398,000,000**
Less: Expenses			
Depreciation expense		62,500,000	
Repairs expenses		22,000,000	
Drivers' wages		60,000,000	
Maintenance wages		15,000,000	
Parts and consumables		70,000,000	
Licenses and insurance	20,000,000		
Less: Insurance prepayment	4,000,000	16,000,000	
Administration salaries		20,000,000	
Sundry administrative expenses		12,000,000	
Drivers' overnight expenses	6,000,000		
Add: Drivers claims unpaid	150,000	6,150,000	
Directors salaries		25,000,000	
Interest on debenture		5,000,000	**313,650,000**
Profit before tax			84,350,000
Income tax			22,400,000
Profit after tax			**61,950,000**
8% Preference shares dividend		8,000,000	
Proposed equity share dividend		20,000,000	
Transfer to general reserves		2,000,000	30,000,000
Retained profit			**31,950,000**

MBL Company Ltd.
Statement of financial position as at 31st December, 2021

Details	**TZS**	**TZS**	**TZS**
Non-current assets			
Freehold property		165,000,000	
Motor lorries at cost	360,000,000		
Less: accumulated depreciation	172,500,000	187,500,000	352,500,000
Current assets			
Bank and cash		20,000,000	
Closing inventory		33,000,000	
Prepayment		4,000,000	57,000,000
Total assets			**409,500,000**
Equity and liabilities			
Equity			
1,000 equity shares fully paid			100,000,000
8% Redeemable preference shares			
of TZS 1,000 @ fully paid			100,000,000
General reserves			2,000,000
Retained earnings			101,950,000
(70,000,000+31,950,000)			
Non-current Liabilities			
10% Debenture			50,000,000
Current Liabilities			
Unpaid driver's claim		150,000	
Unpaid debenture interest		5,000,000	
Unpaid proposed dividend on			
equity shares		20,000,000	
Unpaid proposed dividend on			
preference shares		8,000,000	
Unpaid tax		22,400,000	55,550,000
Total Equity and liabilities			**409,500,000**

Statement of cash flows

Information about cash flows of an entity is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents, and the needs of the entity to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an entity to generate cash and cash equivalent and the timing and certainty of their generation. Cash flows are classified by activity so that users of financial statements can assess the impact of these activities on the financial position of the enterprise, and the relationship among the activities. Cash flows are classified under: operating activities, investing activities and financing activities.

Operating Activities

Operating activities are the principal revenue producing activities of the entity and other activities that are not investing or financing activities. Examples of operating activities includes cash receipts from sale of goods and the rendering of services, cash receipts from royalties, fees, commissions and other revenue, cash payments to suppliers for goods and services, cash payments to and on behalf of employees, cash receipts and cash payments of an insurance entity for premiums and claims, annuities and other policy benefits, cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities.

Investing Activities

Investing activities involves the acquisition and disposal of long-term assets and other investments not included in cash equivalent, examples of investing activities are:

(a) Cash payments to acquire property, plant and equipment, intangibles and other long-term assets.

(b) Cash receipts from sales of property, plant and equipment, intangibles and other long-term assets.

(c) Cash payment to acquire equity or debt instruments of other entities and interests in joint ventures (other than payments for those instruments considered to be cash equivalents or those held for dealing or trading purposes).

(d) Cash receipts from sales of equity or debt instruments of other entities and interests in joint ventures other than receipts for those instruments considered to be cash equivalent or those held for dealing or trading purposes.

(e) Cash advances and loans made to other parties (other than advances and loans of a financial institution).

(f) Cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution).

Financing Activities

Financing activities are the activities that result in changes in the size and composition of the contributed equity and borrowings of the entity, examples of financing activities are:

(a) Cash proceeds from issuing shares or other equity instruments.
(b) Cash payments to owners to acquire or redeem the entity's shares.
(c) Cash proceeds from issuing debentures, loan, notes, bonds, mortgages and other short or long-term borrowings.
(d) Cash repayments of amounts borrowed.
(e) Cash payment by a lessee for the reduction of the outstanding liability relating to a finance lease.

Interest and dividends

Cash flows from interest and dividends received and paid should be disclosed separately. Each should be classified in consistent manner from period to period as operating, investing or financing activities.

Taxes on Income

Cash flows arising from taxes on income should be separately disclosed and should be classified as cash flows from operating activities unless they are specifically identified with financing or investing activities.

Methods of statement of cash flows presentation

There are two methods of presenting the statement of cash flows namely indirect method and direct method.

Indirect method

Under this method the profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals, or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.

Example 6.23

WANGOZI Ltd. is a firm dealing with production and sell of leather products. Its cash flows and other related financial information for year ended 31st December, 2021 are provided below:

Details	"TZS 000"
Cash and cash equivalents as at 1st January, 2021	120,000
Cash and cash equivalents as at 31st December, 2021	410,000

Profit before taxation	3,570,000
Depreciation expense	450,000
Income from investment	500,000
Interest expense for the period	400,000
Increase in trade and other receivables	500,000
Decrease in inventories	1,050,000
Proceeds from issue of share capital	250,000
Decrease in trade payables	1,740,000
Interest paid	270,000
Income taxes paid	900,000
Dividends paid	1,290,000
Cash paid to purchase property, plant and equipment	900,000
Proceeds received from sale of equipment	20,000
Interest received from investment	200,000
Dividends received	200,000
Proceeds from long-term borrowings	250,000

Required: Prepare the statement of cash flows for the year ended 31st December, 2021 using indirect method.

Solution

WANGOZI Ltd.'s statement of cash flows year ended 31st December, 2021

Details	**"TZS 000"**	**"TZS 000"**
Cash flows from operating activities		
Profit before taxation	3,570,000	
Adjustments for:		
- Depreciation	450,000	
- Investment income	(500,000)	
- Interest expense	400,000	
	3,920,000	
Increase in trade and other receivables	(500,000)	
Decrease in inventories	1,050,000	
Decrease in trade payables	(1,740,000)	
Cash generated from operations	2,730,000	
Interest paid	(270,000)	
Income taxes paid	(900,000)	
Net cash from operating activities		**1,560,000**

Cash flows from investing activities		
Purchase of property, plant and equipment	(900,000)	
Proceeds from sale of equipment	20,000	
Interest received	200,000	
Dividends received	200,000	
Net cash used in investing activities		**(480,000)**
Cash flows from financing activities		
Proceeds from issue of share capital	250,000	
Proceeds from long-term borrowings	250,000	
Dividends paid	(1,290,000)	
Net cash used in financing activities		(790,000)
Net increasein cash and cash equivalents		290,000
Cash and cash equivalents at beginning		**120,000**
Cash and cash equivalents at end of period		**410,000**

Direct method

Under this method the major classes of gross cash receipts and payments are disclosed.

Example 6.24

AFYA Corporation commenced business on 1st January, 2021. As an expert you have been requested by management to prepare a statement of cash flows for presentation to the board of directors. You have obtained the following information for the year ended 31st December, 2021.

Details	**TZS**
Cash and cash equivalent at the beginning of the period	25,000,000
Revenue received in cash	220,000,000
Cash outflows for operating expenses	148,000,000
Purchased land and building for cash	165,000,000
Borrowed from a local bank	50,000,000
Issue of capital shares for cash	100,000,000
Issue of cash dividends	120,000,000
Cash and cash equivalent at the end of the period	70,000,000

You are required to prepare a statement of cash flow for the year ended 31st December, 2021 using the direct method.

Solution

AFYA corporation statement of cash flow for the year ended 31st December, 2021 using the direct method

Details	TZS	TZS
Cash flow from operating activities		
Revenue received in cash	220,000,000	
Cash outflows for operating expenses	(148,000,000)	
Net cash flow from operating activities		720,000,000
Cash flow from investing activities		
Purchased land and building for cash	165,000,000	
Net cash outflows to investing activities		165,000,000
Cash flow from financing activities		
Borrowed from a local bank	50,000,000	
Issue of capital shares for cash	100,000,000	
Issue of cash dividends	(12,000,000)	
Net cash inflows from financing activities		138,000,000
Increase in cash and cash equivalent		45,000,000
Cash and cash equivalent at the beginning		**25,000,000**
Cash and cash equivalent at the end		**70,000,000**

Chapter summary

1. A company is an association of persons created by law with a perpetual succession and a common seal. It is a form of business organisation which allows a group of people to pool their resources together (energy, time, and money) for profit.

2. There are basically two categories of companies namely: statutory companies and registered companies. Registered companies are further categorized as Private or Public companies, and as limited or unlimited companies.

3. A share is a unit of ownership of a company. It is a certificate with a denominated value, which shows ownership of a stake in a company. There are two types of shares namely equity/ordinary shares and preference shares. Shares might

be issued to the public at par, at a premium, or at a discount, and would either be paid for in full at application or paid for in instalments.

4. If a shareholder fails to pay the due amount of allotment and/or any call on shares issued by the company, and therefore the call-in arrears remains unpaid for a long time after making a call from the shareholders, the Directors if authorized by articles of association, may cancel the shares issued to those members. This cancellation is called forfeiture of shares.
5. Re issue of shares occurs when a company decides to resell the forfeited shares to the public. Reissue of shares involves reinstating the issued share capital at par value to the extent to which other shares are appearing credited to share capital account.
6. The price at which forfeited shares can be reissued should be in such a way that, the reissue price plus amount paid per share before cancellation is equal to or more than the par value per share.
7. Share redemption involves an outflow of cash from a company in getting back its own shares so that it may then cancel them. Legally, 'redeeming' means the buying back of shares which were originally issued as 'redeemable shares'.
8. A debenture is an acknowledgement of a loan to a company. It is usually issued under the company's seal and bears a fixed rate of interest.
9. Redemption of debentures involves the repayment of these debentures by the company to the debenture holders. In the process of redemption, the companies discharge its liability to debenture holders and remove it from the statement of financial position.
10. There are five (5) common methods in which redemption of debentures can take place. These methods are payment in lump sum, payment in instalments, purchase in open market, and conversion into shares or new debentures.
11. The Companies Act requires every company to prepare financial statements at the end of each accounting period. The financial statements of a company comprises of a statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity, statement of cash flows and notes which comprises a summary of significant accounting policies and other explanatory notes.

Revision exercise

1. Differentiate between a share and a debenture.
2. Describe conditions in which capital redemption reserve fund account is created by the company.
3. Explain the uses of capital redemption reserve fund.
4. What are the necessary conditions for company to redeem its redeemable preference shares?
5. Maria Chai Plantations Ltd. was registered with a capital of TZS 100,000,000 divided into equity shares of TZS 1,000 each. The company offered to public 50,000 shares at a premium of TZS 200 per share. The amount on shares was payable as:
   - TZS 250 on application
   - TZS 500 (including TZS 200 premium) on allotment
   - TZS 200 on first call and
   - TZS 250 on final call.

   Applications were received for 75,000 shares. Shares were alloted to the applicants on prorata basis. Bahati who was allotted 500 shares failed to pay the allotment and calls money. His shares were forfeited. Baraka who was holding 200 shares did not pay the first call. Final call was not made.

   Required: Make journal entries to record the above transactions in the books of Maria Chai Plantations Ltd.
6. NYUMBANI Company Ltd. issued 60,000 equity shares of TZS 1,000 to the public in order to raise funds to finance expansion of business. The payments for were as follows:
   - TZS 250 on application;
   - TZS 375 on allotment;
   - TZS 250 on first call; and
   - TZS 125 on second and final call.

   Applications were received for 73,120 equity shares. Applicants for 1,120 equity shares were rejected and refunded. Excess application money was retained to reduce money due on allotment.

   All sums due were received except holders of 800 shares failed to pay their sum due on first and second call, later on those 800 shares were forfeited for non-payment of the first and second calls. 600 shares among the forfeited shares were reissued as fully paid for TZS 400 each.

   You are required to prepare:

   (i) Ledger accounts to record the above transactions; and

   (ii) Statement of financial position extract.

7. A company issued for public subscription 40,000 equity shares of TZS 1,000 each, payable as under:
   - TZS 200 on application;
   - TZS 500 on allotment;
   - TZS 200 on first call; and
   - TZS on second call.

   Applications were received for 60,000 shares. Allotment was made on pro-rata basis to the applicants for 48,000 shares, the remaining applications being refused and refunded in full. Money over-paid on application was utilised towards sums due on allotment.

   Joba, to whom 1,800 shares were allotted, failed to pay for the first and second calls money and Siya to whom 4,000 shares were allotted failed to pay the final call. These shares were subsequently forfeited after the second call. All the forfeited shared were sold as fully paid up, at TZS 800 per share.

   You are required to prepare:

   (i) Ledger accounts to record the above transactions; and

   (ii) Statement of financial position extract.

8. KUKUA Ltd., decided to redeem their preference shares as on 30th June, 2021 on which their statement of financial position was provided as follows:

KUKUA Ltd.

Statement of financial position as at 30th June, 2021

Assets	**TZS**
Noncurrent assets	
Property, plants and equipment	3,200,000,000
Current assets	
Cash and bank	800,000,000
Total assets	**4,000,000,000**
Equity share capital and reserves	
24,000,000 equity shares of TZS 100 each	2,400,000,000
4,000,000 10% redeemable preference shares of TZS 100 each fully paid	400,000,000
Share premium	40,000,000
Capital redemption reserve fund	140,000,000
Profit and loss account	840,000,000
Current liabilities	
Account payables	180,000,000
Equity share capital and liabilities	**4,000,000,000**

Additionally, the following information took place on 1st July, 2021:

(a) The redemption was to be done at a premium of 5% on fully paid shares which were due for redemption.

(b) The capital redemption reserve funds appearing in the statement of financial position is the reserve brought into account being the result of redemption took place in the year ended 30th June, 2020.

(c) The redemption of redeemable preference shares is to be financed through issue of 20,000 new equity shares at a premium of 20% and the balance from profit and loss account.

(d) The redemption was duly carried out as planned.

You are required to prepare:

(i) Ledger accounts to record the redemption of redeemable preference shares; and

(ii) Statement of financial position after redemption

9. The following list of accounts have been prepared by NJIRO Ltd. on 31st December, 2019 which is the end of company accounting period.

Details	**TZS**
Authorized and issued 300,000 equity shares of TZS 1,000 each fully paid	300,000,000
100,000 8% cumulative preferences shares of TZS 1,000 each fully paid	100,000,000
10% debentures	100,000,000
Revenue	1,526,750,000
Opening inventories	325,650,000
Distribution costs	124,300,000
Administrative expenses	216,200,000
Income tax expense	40,000,000
Property, plant and equipment	452,750,000
Intangible assets	215,500,000
Trade receivables	171,880,000
Cash and cash equivalents	5,120,000
Share premium	100,000,000
Retained earnings	363,350,000
General reserves	50,000,000
Revaluation surplus	50,000,000
Trade payables	97,500,000
Short term borrowings	51,250,000

The following additional information were also available:

(a) Income tax on profits for the year was estimated at TZS 40,000,000 and was due for payment on 31st January, 2020.

(b) Interest on debenture and dividends on preference shares were not paid up to 31st December, 2019.

(c) For year ended 31st December, 2019, NJIRO Ltd. purchased goods with cost of TZS 1,137,600,000.

(d) Carriage in wards amounted to TZS 10,500,000.

(e) The directors recommended that a dividend of TZS 350 per share to be paid on the equity share capital, however, no equity dividends was declared and paid during the year ended 31st December, 2019.

(f) Ending inventories is valued at TZS 425,750,000.

From the information given above, prepare:

(i) The income statement of NJIRO Ltd. for the year ended 31st December, 2019.

(ii) NJIRO Ltd. statement of financial position as at 31st December, 2019.

10. Debentures of TZS 100,000,000 are issued on 1st January, 2017. They were redeemed five years later on 31st December, 2021. The company therefore decided to set aside an equal annual amount which, at an interest rate of 5 per cent, which provided TZS 100,000,000 on 31 December 2021.

Annual sinking fund instalments to provide for TZS 1

Year	3%	3.50%	4%	4.50%	5%
3	0.32353	0.321933	0.320348	0.318773	0.317208
4	0.239028	0.237251	0.23549	0.233744	0.232012
5	0.188354	0.186481	0.184627	0.182792	0.180975
6	0.154597	0.152668	0.150761	0.148878	0.147017
7	0.130506	0.128544	0.126609	0.124701	0.122819
8	0.112456	0.110476	0.108527	0.106609	0.104721
9	0.098433	0.096446	0.094493	0.092574	0.09069
10	0.08723	0.085241	0.083291	0.081378	0.079504

Required: Prepare the necessary ledger accounts for the year ended 31st December, 2021.

11. The following information was obtained from the books of OLIVER Company Ltd. regarding the issue of redeemable preference shares during the year 2021/2022.

OLIVER Company Ltd.'s Capital Balances as at 30th September, 2021 were as follows:

Details	**TZS**
Redeemable Preference share Capital:	
250,000 Preference shares of TZS 1,000 each fully called up	250,000,000
Less: Calls in arrears (final call of TZS.200 each)	1,200,000
	248,000,000
Equity share Capital:	
3,000,000 Equity shares of TZS 100 each fully called up	300,000,000
General reserve	112,000,000
Share premium	15,000,000

Preference shares were redeemable on 1st July, 2022 at TZS1,100 each.
On getting a reminder about payment of calls-in-arrears, shareholders holding a total of 4,500 preference shares paid their dues by 31st may, 2022. One shareholder holding the remaining preference shares on which calls were due, died on 3rd April, 2022 and his legal heirs regretted their inability to pay the amount due thereon. Consequently, the directors forfeited those shares and re-issued them as fully paid on 10th June, 2022 receiving TZS 375,000.

Repayments for redemption of preference shares were completed by 30th September, 2022 except for one shareholder, holding 4,000 shares, who was out of Tanzania.
Further, 400,000 Equity shares of TZS 600 each were issued at par for the purpose of the above redemption.

You are required to prepare:

a) Journal entries to effect the above transactions up to 30th September, 2022
b) Balances extract as on 30th September, 2022

12. DHAHABU Company Ltd. made an issue of 100,000, 6% debentures of TZS 1,000 each at TZS 960 per debenture on January, 2019 to raise enough fund to finance its pending investing opportunities. The terms of issue provided for the redemption of 20,000 debentures every year starting from the end of 2019 either by purchase or by draw of lot at par at the company's option. TZS 1,000,000 was written-off the debenture discount account every year. On 31st December, 2019 the company purchased for cancellation debentures of the face value of TZS

8,000,000 at TZS 950 per debenture and of the face value of TZS 12,000,000 at TZS 900 per debenture. The remaining debentures were redeemed by draw of lots at par in 2020, 2021, 2022 and 2023, being 20,000 debentures every year.

You are required to prepare:

i) 6% Debentures account; and
ii) Discount on issue of debentures account.

13. MWADUI ALMASI Ltd. was incorporated on 1st October 2021 with authorised share capital of 1,000,000 equity shares of TZS 1,000 each. On 15th November 2021, the company made an issue of 80% of the authorised equity share capital for public subscription payable as follows: -

Date	**Stage**	**TZS**
15th -30th November, 2021	Application	TZS 400
1st January, 2022	Allotment (including premium)	TZS 600
1st April, 2022	First and final call	TZS 200
Total		**TZS 1,200**

The response to the issue and allotment decision is summarised below:

Categories	**Number of applicants**	**Shares applied by each applicant**	**Shares allotted to each applicant**
A	5	50,000	50,000
B	10	5,000	1,250
C	30	6,000	5,500
D	40	15,000	7,500
E	150	200	Nil

Any amount received in respect of rejected applications were refunded in full. Allotment monies were all received in full. All the amount due on calls were received in full except for Lulu and Damas. Lulu who applied for shares under category C failed to pay for the 2,500 equity shares she was allotted and Damas who applied for shares under category B failed to pay for the 1,000 equity shares allotted to him. These shares were all forfeited.

The company directors decided to re-issue all the forfeited shares at TZS 400 per share on 1st June 2022.

You are required to prepare:

a) Journal entries to record the above transaction in the books of MWADUI ALMASI Ltd; and

b) Extract statement of financial position relating to the above transactions.

Chapter Seven

Hire purchase accounting

Introduction

In life it is common that people are willing to acquire valuable assets but unable to make outright payments to acquire them. There are some arrangements that can be made for such people to acquire the intended assets and be allowed to pay for them in future on certain conditions. This enables the purchaser to use the asset while paying for it in instalments over an agreed period of time. Hire purchase system allows customers to acquire high value durable goods like cars, televisions, refrigerators on the conditions that they will pay for them in the future on instalments basis. In hire purchase, the seller is known as a 'hire vendor' and the purchaser is known as a 'hire purchaser'. In this chapter you will learn about the nature of hire purchase, calculation of hire purchase interest, accounting entries for recording hire purchase transactions, repossessions of assets, and preparations of final accounts on hire purchase. The competencies developed in this chapter will to enable you to deal with, and handle business transactions under hire purchase agreements and to prepare financial accounts in the books of the hire vendor and the hire purchaser.

Nature of hire purchase

Hire purchase is a method of purchasing goods whereby the buyer (hire purchaser) enters into an agreement with the seller (hire vendor) for the exchange of goods/ properties by paying through a series of regular instalments. This system allows the seller to retain ownership of the sold goods/properties until the final instalment is paid. Hire purchase method is extensively applied in the acquisition of non-current assets such as equipment, machinery, motor vehicle, and the like.

The agreement between the hire purchaser and the hire vendor is known as the hire purchase agreement. The hire purchase agreement requires the hire purchaser to pay for the goods at a higher price than the price that could be paid on outright cash purchase to compensate the hire vendor for time value of money and risk on deferred instalments. The hire purchaser will also be required to make an initial payment (down payment) immediately after signing the agreement, followed by a series of regular instalments for identified period.

Hire purchase system differs from the outright purchase in several ways. Unlike the outright purchase system, in hire purchase, ownership of the assets is not transferred to the hire purchaser until the final instalment is paid and the hire purchaser agrees. Outright purchase also involves a single payment for the assets, while the hire purchase system is characterised by a series of instalments over an agreed period. Additionally, price paid by the hire purchaser is higher than the price which could be paid if the product/property was acquired in outright purchase. During the hire purchase agreement, it may happen that the hire purchaser fails to pay the instalments. This will require the hire vendor to take back the asset from the hire purchase without any refund to the hire purchaser.

Terms used in hire purchase

Hire vendor: A person who delivers the goods along with its possession to hire purchaser under the hire purchase agreement.

Hire purchaser: A person who obtains goods/properties and the right to use them but not ownership, from hire vendor under hire purchase agreement.

Hire purchase price: The total amount payable by hire purchaser to obtain ownership of the asset purchased under hire purchase agreement. The hire purchase price comprises of cash price plus hire purchase interest.

Hire purchase interest: An amount of money paid by hire purchaser to hire vendor, above the cash price, as a compensation for time value of money and risk on deferred instalments.

Hire purchase instalment: An amount which the hire purchaser pays in regular intervals up to a certain period to obtain ownership of asset as specified in the hire purchase agreement. For example, an asset might be sold for cash at TZS 5,000,000. But if sold on hire purchase the sale price becomes 5,400,000, which should be paid in full on monthly basis within 6 months. In this case the monthly instalment becomes TZS 900,000, while the interest is TZS 400,000.

Cash price: An amount to be paid by buyer on outright purchase in cash.

Down payment: An initial payment made to the hire vendor by hire purchaser at the time of entering into hire purchase agreement.

Possession – a condition of having control over the goods/assets without regard to their ownership. The hire vendor transfers only possession of the goods to the hire purchaser immediately after the agreement for hire purchase is made.

Repossession – a condition occurring when a hire purchaser default payment of one or more instalments. Under this condition, the hire vendor takes back the goods/assets without making any compensation to the hire purchaser.

Ownership – a state of legal possession and control over the goods/assets. The hire vendor passes to the hire purchaser the right to possess but not to own the asset involved.

Exercise 7.1

1. TUMA Ltd. is a newly established company. The finance manager wants to purchase photocopy machine from the Dar es salaam Auto Supplies (DAS) Ltd. The Marketing manager of DAS Ltd. has provided him with two quotations showing the outright price and hire purchase. Unfortunately, the finance manager is not aware of the later method.

   Required:

   Assist the finance manager by explaining the following:
   (a) The meaning of hire purchase and hire purchase agreement
   (b) Similarities and differences between hire purchase and outright purchase.

2. Briefly explain the meaning of the following terminologies: -
   (a) Hire purchase interest
   (b) Down payment
   (c) Hire purchase price

Calculation of interest on hire purchase

The hire purchaser is required to pay series of instalments over a period of the agreement. Each instalment comprises of the capital amount for the cash price of the asset and interest expense. It should be noted that though the instalments of a hire purchase agreement may be equal, the interest element in each instalment depend on the method of apportionment. Straight line method, actuarial method and sum of years' digit method are the common methods of apportioning hire purchase interest. The total amount of interest will be the same in all the three methods but the interest amount in each instalment will differ.

Straight line method

Under this method, the interest is apportioned evenly over the number of instalments agreed upon. The hire purchase interest per instalment = $\frac{\text{Total hire purchase interest}}{\text{Total number of instalments}}$

Hire purchase interest = Hire purchase price – Cash price

Alternatively, when the interest rate is given:

Hire purchase interest per instalment = (Hire purchase price - Cash price) × interest rate given.

Example 7.1

On 1st January, 2015 JOY Ltd. acquired a motor vehicle from PEC Ltd. on hire purchase. The terms of agreement were as follows:

Details	**Amounts in TZS**
Cash price	18,000,000
Down payment	3,000,000
Hire purchase price	19,500,000
Nominal rate of interest is 20%	
Number of annual instalments is five (5)	

Required:

Calculate the amount of interest to be included in each instalment using straight line method

Solution

Hire purchase interest payable per instalment	**TZS**
Hire purchase price	19,500,000
Less: Cash price	18,000,000
Total hire purcase interest	1,500,000
Number of instalments	5
Hire purchase interest payable per instalment	**300,000**

Analysis of instalments:

Date	Cash price outstanding	Principal	Interest	Total instalment	Closing balance
01st Jan., 2015	18,000,000	3,000,000	-	-	15,000,000
31st Dec,. 2015	15,000,000	3,000,000	300,000	3,300,000	12,000,000
31st Dec., 2016	12,000,000	3,000,000	300,000	3,300,000	9,000,000
31st Dec., 2017	9,000,000	3,000,000	300,000	3,300,000	6,000,000
31st Dec., 2018	6,000,000	3,000,000	300,000	3,300,000	3,000,000
31st Dec., 2019	3,000,000	3,000,000	300,000	3,300,000	-
TOTAL		**18,000,000**	**1,500,000**	**16,500,000**	-

Actuarial method

This method apportions the total hire purchase interest by charging the interest rate on the outstanding balance of the cash price after deducting the down payment.

Example 7.2

On 1st January, 2016 UMATI Ltd. acquired a machinery from NAIMA Supplies Ltd. on hire purchase under the following terms:

Details	Amounts in TZS
Cash price	18,000,000
Down payment	2,000,000
Hire purchase price	22,400,000
Rate of interest is 10%	
Number of annual instalments is four (4)	

Required: Calculate the amount of interest to be included in each instalment.

Solution

Amount per instalment	**TZS**
Hire purchase price	22,400,000
Less: Down payment	2,000,000
Total instalments	20,400,000
Number of instalments	4
Amount per instalment	**5,100,000**

Hire purchase interest	**TZS**
Hire purcahse price	22,400,000
Less: Cash price	18,000,000
Hire purchase interest	**4,400,000**

HP interest per instalment = Cash price outstanding × rate of interest

On 1st January 2016: Cash price – Down payment = Interest

Analysis of instalments:

Date	Cash Price outstanding	Principal	Interest	Total instalment	Closing balance
01st Jan., 2016	18,000,000	2,000,000	-	-	16,000,000
31st Dec., 2016	16,000,000	3,500,000	1,600,000	5,100,000	12,500,000
31st Dec., 2017	12,500,000	3,850,000	1,250,000	5,100,000	8,650,000
31st Dec., 2018	8,650,000	4,235,000	865,000	5,100,000	4,415,000
31st Dec., 2019	4,415,000	4,415,000	685,000*	5,100,000	-
TOTAL		**18,000,000**	**4,400,000**	**20,400,000**	

*This is the balance figure at the end of the HP agreement period which is obtained by taking Total HP interest minus HP interests already paid.

Sum of the years digit method

Under this method, the hire purchase interest is apportioned according to the digits assigned. Usually, the digits are assigned in a descending order. The highest digit to the first instalment and the digit 1 to the last instalment. This method results to charging more interest in earlier periods compared to later periods. The logic behind is that the acquired asset is assumed to be more productive in early years. The interest proportion to each accounting period is then calculated as follows:

$$\text{Interest proportion} = \frac{\text{Digit given to instalment}}{\text{Sum of digits}} \times \text{Total interest}$$

Sum of digits can be obtained using the following formula:

$$\text{Sum of digits} = \frac{n(n+1)}{2}$$

Note that, ‘n’ is the number of years.

Example 7.3

On 1st January, 2017 MKWAJUNI Ltd. acquired computers from KOA Ltd. on hire purchase agreement which provided the following terms:

Details	Amounts in TZS
Cash price	12,400,000
Down payment	6,000,000
Hire price	13,020,000
Number of annual instalments is four (4)	

Required:

Calculate the hire purchase interest per instalment under each of the following situations:

(a) If the first instalment is due at the end of 2017; and

(b) If the first instalment is due at the date of sale.

Solution

Hire purchase interest	**TZS**
Hire purchase price	13,020,000
Less: Cash price	12,400,000
Hire purchase interest	**620,000**

(a)

Number of instalments to be apportioned with interest is 4:

$$\text{Sum of digits} = \frac{n(n+1)}{2}$$

$$= \frac{4(4+1)}{2} = 10$$

HP Interest payable per instalment is calculated as follows:

Date	Digit assigned	Digit assigned/ Sum of digits	Hire purchase interest per instalment in TZS
31st December, 2017	4	4/10	$= 620{,}000 \times \frac{4}{10} = 248{,}000$
31st December, 2018	3	3/10	$= 620{,}000 \times \frac{3}{10} = 186{,}000$
31st December, 2019	2	2/10	$= 620{,}000 \times \frac{2}{10} = 124{,}000$
31st December, 2020	1	1/10	$= 620{,}000 \times \frac{1}{10} = 62{,}000$
Total			**620,000**

(b)

If the first instalment is paid together with the down payment, then, the remained number of instalments to be charged interest becomes three (3) instead of four (4). Hence, the sum of digits will be:

$$\text{Sum of digits} = \frac{n(n+1)}{2} = \frac{3(3+1)}{2} = 6$$

Hire purchase interest payable per instalment is calculated as follows:

Date	Digit assigned	Digit assigned/ Sum of digits	Hire purchase interest per instalment
31st December, 2017	3	$\frac{3}{6}$	$= 620,000 \times \frac{3}{6} = 310,000$
31st December, 2018	2	$\frac{2}{6}$	$= 620,000 \times \frac{2}{6} = 206,667$
31st December, 2019	1	$\frac{2}{6}$	$= 620,000 \times \frac{1}{6} = 103,333$
Total			**620,000**

Exercise 7.2

1. GULIO Ltd. acquired a photocopy machine from CHAPA Ltd. on 1st January, 2020. The cash price was TZS 4,000,000 and the hire purchase price was TZS 4,500,000. The down payment of TZS 1,500,000 was paid followed by two annual instalments of TZS 1,500,000 payable at the end of 31st December, 2020 and 2021. Hire purchase interest was 20% per annum.

   Required:
   Calculate the annual interest payable for the years ended 31st December, 2020 and 2021 using the following method:
   (a) Straight line method;
   (b) Actuarial Method; and
   (c) Sum of year digits.

2. On 1st January, 2022, PAMOJA Ltd. acquired an asset using hire purchasing on the following terms:

Cash price	TZS 10,000,000
Down payment	TZS 4,000,000
Hire purchase price	TZS 12,000,000
Interest is 25% on outstanding balance	
Four (4) annual instalments, each at	TZS 1,500,000

Required:

Calculate the amount of interest to be included in each instalment using the following method:

(a) Straight line method;

(b) Actuarial Method; and

(c) Sum of year digits.

3. MWENDOKASI Ltd. purchased spare parts from MAGARI YETU Ltd. on 1st January, 2020. Cash price was TZS 4,000,000. Hire purchase price was TZS 4,600,000 payable into two annual instalments of TZS 2,304,000 at the end of each year. The hire purchase interest rate is 10% per annum.
Required: Calculate interest chargeable at the end of each accounting period.

Calculation of cash price

Sometimes, figures for cash price may not be given or made available direct, in such a situation it is not possible to record the accounting transactions in the books of the buyer because the purchased asset is recorded using the cash price. Therefore, cash price should be ascertained using the following alternative ways:

(a) With the help of annuity table

(b) Without the help of annuity table

Calculation of cash price with the help of annuity table

The use of annuity table simplifies the calculation of interest amount to be included in each instalment. In the annuity table the rate of interest is given in the rows and the years in the columns. When using the annuity table, the first step is to calculate the present value of each instalment. Then, the down payment is added to the summation of present values to obtain cash price. The procedure is as follows:

(i) Observe the given rate of interest in the row and the year in the column to find out the corresponding figure to the given interest and year.

(ii) The obtained figure represents a present value of each 1 unit of currency.

(iii) Multiply the present value with the amount of the instalment to obtain the present value of the instalment. This is the amount of cash price included in the instalment.

(iv) Calculate the present values of all other instalments in same manner.
(v) Add the present values of all instalments to the down payment if any, the resulting figure will be the total cash price.

Example 7.4

MABARA Ltd. is a business firm dealing with manufacturing of home furniture using steel pipes and bars. On 1st July, 2021 the firm purchased a welding machine on hire purchase system, to assist in the manufacturing process. The hire purchase price was TZS 3,750,000, payable as follows:

Details	**Amount in TZS**
Down Payment	697,500
1st Instalment on 30th June, 2022	1,069,500
2nd instalment on 30th June, 2023	1,353,000
3rd Instalment on 30th June, 2024	630,000

The rate of interest is 5% per annum, the annuity table shows the present value of TZS 1 in different periods as:

Period		0	1	2	3
Interest rate	5%	1.000	0.9524	0.9070	0.8639

Required:

Calculate the cash price of the welding machine.

Solution

	Down payment	**Instalments**	**Present value of a single sum at 5%**	**Amount**
July, 2021	697,500	-	1	697,500
30th June, 2022	-	1,069,500	0.9524	1,018,592
30th June, 2023	-	1,353,000	0.9070	1,227,171
30th June, 2024	-	630,000	0.8639	544,257
Total cash price				3,487,520

Calculation of cash price without the help of annuity table

Under this method interest is calculated starting with the last instalment. Suppose there are three instalments. The interest will be calculated first on the third instalment, then on the-second and lastly on the first instalment. Notice that, no interest is calculated on down payment as it does not involve any element of interest. Under this method cash price, will have to be calculated with the help of total amount due on hire purchase price.

Interest involved in each instalment will have to be calculated first, then subtract the interest amount from the total amount due, to obtain the outstanding amount of cash price. This is done as:

$$\text{Interest} = \text{Total amount due at time of instalment} \times \frac{\text{Interest rate}}{100 + \text{interest rate}}$$

Steps to be followed for the calculation of cash price due at the time of each instalment assuming there are three yearly instalments are as follows:

(a) Calculate the interest on the instalment of the third year, deduct interest from this instalment. The resulting figure is the outstanding cash price at the time of third (last) instalment.

(b) Add the cash price calculated under (a) above to the instalment amount of the second year, calculate the interest on the sum so obtained and subtract it from the total amount due at the end of' the second year to get the outstanding cash price at the time of second instalment.

(c) Add the cash price calculated under (b) above to the instalment amount of the first year and calculate the interest on the sum so obtained. Deduct the amount of interest from the total amount due at the end of the first year; the result figure is the cash price due at the time of the first instalment

(d) Add the cash price calculated under (c) above to the down payment, if any. Then, sum obtained will be the cash price.

Example 7.5

LUTH GARMENTS Ltd. purchased a sewing machine on 1st January, 2021 on hire purchase basis for an interest of 5%. The hire purchase price was TZS 5,000,000 Payable as follows:

Period	Down payment (TZS)	Instalments (TZS)
1	930,000	1,426,000
2	-	1,804,000
3	-	840,000

Required:

Calculate the cash price of the sewing machine and interest paid with each instalment.

Solution

	Amount	Interest
Total amount due on 3rd instalment (last)	**840,000**	
Less: interest	(40,000)	$840,000 \times \frac{5}{105} = 40,000$
Outstanding cash price on 3rd instalment	800,000	
Add: 2nd instalment	1,804,000	
Total amount due on 2nd instalment	**2,604,000**	
Less: interest	(124,000)	$2,604,000 \times \frac{5}{105} = 124,000$
Outstanding cash price on 2nd instalment	2,480,000	
Add: 1st instalment	1,426,000	
Total Amount due on 1st instalment	**3,906,000**	
Less: interest	(186,000)	$3,906,000 \times \frac{5}{105} = 186,000$
Outstanding cash price on 1st instalment	3,720,000	
Add: down payment	930,000	
Cash price	**4,650,000**	
Hire purchase interest		**350,000**

Cash price = Hire purchase price – hire purchase interest

= TZS 5,000,000 – TZS 350,000 = **TZS 4,650,000**

Exercise 7.3

1. UVUMI Ltd. acquired a machine on 1st January, 2018 under a hire purchase. The agreement provides 5 half-yearly instalments of TZS 600,000 each, the first instalment being due on 1st July, 2018. The hire purchase interest rate is 10% per annum:

   Required: Calculate the cash price of the machine.

2. Pasua Ltd. purchased a car on hire purchase system on 1st January, 2015. The total cash price of the car is TZS 45,000,000. However, the agreement requires a down payment of TZS 9,000,000 and three instalments of TZS 17,000,000, TZS 15,000,000 and TZS 10,846,000, payable anually at the end of 2015, 2016, and 2017 respectively. The interest was charged at 10% p.a.
   Required:
   Calculate interest paid by the buyer to the seller in each year.

3. AMBONI Stationeries Ltd. purchased a heavy-duty printer on hire-purchase system. As per terms of agreement, AMBONI Stationaries Ltd. was required to pay TZS 3,000,000 as down payment, TZS 4,000,000 at the end of first year, TZS 3,000,000 at the end of second year, and TZS 5,000,000 at end of third year. Interest is charged at 10% p.a.

   Required: Calculate the total cash price of the printer and interest paid with each instalment.

Accounting entries for recording hire purchase transactions

Accounting entries in the books of hire purchaser

When the asset is purchased on hire purchase, it is assumed that the purchaser has full intention of paying all the instalments. It is believed that hire purchase is just a method of financing noncurrent assets. In this situation, on purchase of non-current assets, the respective non-current asset account is debited with the total amount of cash price, and the corresponding credit is given to hire vendor's account. Interest is recognised and accounted for at the time when instalments become due by debiting the interest account and crediting the hire vendor's account. For the purpose of accounting for initial cash down payment and annual instalments, the hire vendor's account is debited on the relevant date and crediting the bank/cash account. The following are accounting entries in the books of hire purchaser.

S/N	Transaction	Accounting entries
1.	When the asset is purchased on hire purchase.	Dr. Asset account xx Cr. Hire vendor account xx *(With the total cash price of an asset purchased)*
2.	When cash down payment is made.	Dr. Hire Vendor account xx Cr. Bank/cash account xx *(With the amount of down payment paid)*
3.	When the first instalment becomes due.	Dr. Interest account xx Cr. Hire vendor account xx *(With the amount of hire purchase interest accrued)*
4.	When instalments are paid.	Dr. Hire vendor account xx Cr. Bank/cash account xx *(With the amount instalment paid)*
5.	For depreciation charge (at the end of accounting period).	Dr. Depreciation expense account xx Cr. Accumulated depreciation account xx *(With the amount of depreciation charged per annum)*
6.	For transfer of interest and depreciation to profit and loss account.	Dr. Profit or loss account xx Cr. Interest account xx Cr. Depreciation account xx *(With the amount depreciation and hire purchase interest written off in that particular period)*

Note that depreciation on assets bought on hire purchase agreement is calculated on cash price.

Example 7.6

A crushing machine was bought by MZEE Ltd. on hire purchase agreement at price of TZS 7,238,044.4 from MEKO Supplies Ltd. on 1st January, 2018. The agreed price was paid by annual instalments of TZS 2,412,760, TZS 2,412,760, and TZS 2,412,760; on 31st December, of 2018, 2019 and 2020 respectively. The cash price was TZS 6,000,000, while the rate of interest was 10% per annum. Depreciation was calculated using straight line method at the rate of 20% per annum.

Required:

Prepare the following accounts in the books of MZEE Ltd.:

(a) Crushing machine account

(b) MEKO Supplies Ltd. Account

(c) Hire purchase interest account

(d) Depreciation on crushing machine account

(e) Income statement extract

(f) Statement of financial position extract

Solution

Dr. **Crushing machine account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2018	MEKO Supplies Ltd.	6,000,000	31st Dec., 2018	Balance c/d	6,000,000
01st Jan., 2019	Balance b/d	6,000,000	31st Dec., 2019	Balance c/d	6,000,000
01st Jan., 2020	Balance b/d	6,000,000	31st Dec., 2020	Balance c/d	6,000,000

Dr. **Hire purchase Interest account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	MEKO Supplies Ltd.	600,000	31st Dec., 2018	Profit or loss	600,000
31st Dec., 2019	MEKO Supplies Ltd.	418,724	31st Dec., 2019	Profit or loss	418,724
31st Dec., 2020	MEKO Supplies Ltd.	219,320.4	31st Dec., 2020	Profit or loss	219,320.4

Dr. **MEKO Supplies Ltd. account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	Bank	2,412,760	01st Jan., 2018	Crushing machine	6,000,000
31st Dec., 2018	Balance c/d	4,187,240	31st Dec., 2018	Hire purchase interest	600,000
		6,600,000			6 ,600,000
31st Dec., 2019	Bank	2,412,760	01st Jan., 2019	Balance b/d	4,187,240
31st Dec., 2019	Balance c/d	2,193,2040	31st Dec., 2019	Hire purchase interest	418,724
		4,605,964			4,605,964
31st Dec., 2019	Bank	2,412,524	01st Jan., 2020	Balance b/d	2,193,204
			31st Dec., 2020	Hire purchase interest	19,320
		2,412,524			2,412,524

Dr. **Provision for depreciation on crushing machinery account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	Balance c/d	1,200,000	31st Dec., 2018	Profit or loss	1,200,000
31st Dec., 2019	Balance c/d	2,400,000	01st Jan., 2019	Balance b/d	1,200,000
			31st Dec., 2019	Profit or loss	1,200,000
		2,400,000			2,400,000
31st Dec., 2020	Balance c/d	3,600,000	01st Jan., 2020	Balance b/d	2,400,000
			31st Dec., 2020	Profit or loss	1,200,000
		3,600,000			3,600,000

Profit or loss account (extract)

Date	Details	Amount
31st Dec., 2018	Depreciation expense	1,200,000
	Hire purchase interest	600,000
31st Dec., 2019	Depreciation expense	1,200,000
	Hire purchase interest	418,724
31st Dec., 2020	Depreciation expense	1,200,000
	Hire purchase interest	219,320.4

Balance sheet (extract) as at 31st December,

	2018	2019	2020
Non-current assets:			
Crushing machine at cost	6,000,000	6,000,000	6,000,000
Less: Provision for depreciation	1,200,000	2,400,000	3,600,000
Net book value	4,800,000	3,600,000	2,400,000
Noncurrent liabilities:			
MEKO Supplies Ltd.	2,193,204	-	-
Current liabilities:			
MEKO Supplies Ltd.*	1,994,036	2,193,204	-

Workings:

* *Computation of the current liabilities:*

Amount to be paid in 2019	TZS 2, 412,760
Less: Interest (has not yet been recognised)	TZS 418,724
Current liability as at 31st December, 2018	**TZS 1,994,036**

Accounting entries in the books of hire vendor

The hire purchase sale is just like an ordinary sale, except that, with hire purchase, payment is deferred over a period for which the buyer is charged with interest. The vendor debits the hire purchaser's account with full cash price, crediting the hire sales account. The interest amount is debited to hire purchaser's account, when the instalments become due, crediting the hire interest account. Instalment amounts received are credited to the hire purchaser's account and debited to bank/cash account.

The accounting treatments are summarised as:

S/N	Transaction	Accounting entries		
1.	On sale of goods under hire purchase	Dr. Hire purchaser account Cr. Sales account	xx	 xx
2.	On receiving cash down payment	Dr. Bank/cash account Cr. Hire purchaser account	xx	 xx
3.	When hire purchase interest become due	Dr. Hire purchaser account Cr. Hire interest account	xx	 xx
4.	On receiving instalments	Dr. Bank/cash account Cr. Hire purchaser account	xx	 xx

Example 7.7

On 1st January, 2018 HAGAI Ltd. acquired a motor van from FAHARI Ltd. on hire purchase agreement. The terms of the contract were as follows:

(a) The cash price of the van was TZS 100, 000,000;

(b) TZS 40,000,000 was to be paid immediately on signing of the contract;

(c) The balance was to be paid in three annual instalments of TZS 20,000,000 plus interest;

(d) Interest chargeable on the outstanding balance was 10% per annum;

(e) Cost of the motor van to FAHARI Ltd. was TZS 80,000,000; and

(f) Depreciation is to be written-off using the straight-line method at 20% per annum.

Required:

Open up the relevant accounts in the books of FAHARI Ltd. from 1st January, 2018 to 31st December, 2020.

Solution

Dr. **HAGAI Ltd. Account** **Cr.**

Date	Details	Amount “000”	Date	Details	Amount “000”
01st Jan., 2018	Hire purchase sales	100, 000	01st Jan., 2018	Bank - deposit	40,000
31st Dec., 2018	Hire purchase interest	6,000	31st Dec., 2018	Bank -instalment	26,000
			31st Dec., 2018	Balance c/d	40,000
		106,000			106,000
01st Jan., 2019	Balance b/d	40,000	31st Dec., 2019	Bank -instalment	24,000
31st Dec., 2019	Hire purchase interest	4,000	31st Dec., 2019	Balance c/d	20,000
		44,000			44,000
01st Jan., 2020	Balance b/d	20,000	31st Dec., 2020	Bank -instalment	22,000
31st Dec., 2020	Hire purchase interest	2,000			
		22,000			22,000

Dr. **Hire purchase sales account** **Cr.**

Date	Details	Amount “000”	Date	Details	Amount “000”
01st Jan., 2018	Hire purchase trading	100, 000	01st Jan., 2018	HAGAI Ltd.	100, 000

Dr. **Bank account** **Cr.**

Date	Details	Amount "000"	Date	Details	Amount "000"
01st Jan., 2018	HAGAI Ltd.	40,000			
31st Dec., 2018	HAGAI Ltd.	26,000			
31st Dec., 2019	HAGAI Ltd.	24,000			
31st Dec., 2020	HAGAI Ltd.	22,000			

Dr. **Hire purchase interest account** **Cr.**

Date	Details	Amount "000"	Date	Details	Amount "000"
31st Dec., 2018	Profit or loss	6,000	31st Dec., 2018	HAGAI Ltd.	6,000
31st Dec., 2019	Profit or loss	4,000	31st Dec., 2019	HAGAI Ltd.	4,000
31st Dec., 2020	Profit or loss	2,000	31st Dec., 2020	HAGAI Ltd.	2,000

Dr. **Hire purchase trading account** **Cr.**

Date	Details	Amount "000"	Date	Details	Amount "000"
31st Dec., 2018	Cost of goods sold	80,000	31st Dec., 2018	Hire purchase sales	100, 000
	Gross Profit	20,000			
		100,000			100,000

Dr. **Profit or loss account** **Cr.**

Date	Details	Amount "000"	Date	Details	Amount "000"
			31st Dec., 2018	Hire purchase interest	6,000
			31st Dec., 2018	Gross profit on hire purchase trading	20,000
			31st Dec., 2019	Hire purchase interest	4,000
			31st Dec., 2020	Hire purchase interest	2,000

Preparation of hire purchase interest suspense account

The hire purchase interest suspense account is prepared in case the total interest should be determined, recognized, and recorded in total at the time of signing the hire purchase agreement. In this case the total interest not yet accrued is posted to hire purchase interest suspense account. In each of the subsequent due dates, interest accrued for that period is transferred from hire purchase interest suspense account to hire purchase interest income account. Any balance in the hire purchase interest suspense account represents the amount to be apportioned to hire purchase interest income account for next periods. At the year-end, the balance in the suspense account will be shown as a deduction from the hire purchase account. The standard journal entries in the books of hire vendor are summarised as follows:

S/N	Transaction	Accounting entries		
1.	When goods are sold and delivered on hire purchase terms	Dr. Hire purchaser account (Cash price + Total interest) Cr. Hire purchase sales account (cash price) Cr. Hire purchase interest suspense account (total interest)	xx	 xx xx
2.	When down payment is received	Dr. Bank account Cr. Hire purchaser account	xx	 xx
3.	When instalment is received	Dr. Bank account Cr. Hire purchaser account	xx	 xx
4.	To record interest for a particular financial period	Dr. Hire purchase interest suspense account Cr. Hire purchase interest income account (With the interest portion charged for the financial period)	xx	 xx
5.	Closing the interest and hire purchase sales accounts at the year-end	Dr. Hire purchase interest account Cr. Hire purchase sales account Cr. Income statement	xx	 xx xx

Example 7.8

1. HIRESHI Company Ltd. is a firm dealing with production of concrete blocks that are used for building purposes. On 1st January, 2018, the firm acquired a concrete mixer machine from KILIMANI Traders on hire purchase agreement. The terms of sale were as follows:
   - (a) Cash price of the mixer machine was TZS 500, 000
   - (b) TZS 200,000 were to be paid on signing of the contract.

(c) The balance was to be paid in annual instalments of TZS 100,000 plus interest.
(d) Interest chargeable on the outstanding balance was 6% p.a.
(e) Depreciation at 20% per annum is to be written-off using the straight-line method.

Required:

(i) Prepare the relevant accounts in the books of KILIMANI Traders from 1st January, 2018 to 31st December, 2020, using the hire purchase interest method.

(ii) Prepare the relevant accounts in the books of KILIMANI Traders from 1st January, 2018 to 31st December, 2020, using the hire purchase interest suspense method.

Solution:

In the books of Kilimani Traders

(a)Using the hire purchase interest method:

Dr. **HIRESHI Company Ltd. account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01 Jan., 2018	Hire purchase sales	500, 000	01 Jan., 2018	Bank - deposit	200,000
31st Dec., 2018	Hire purchase interest	18,000	31st Dec., 2018	Bank - instalment	118,000
		518,000	31st Dec., 2018	Balance c/d	200,000
					518,000
01 Jan., 2019	Balance b/d	200,000	31st Dec., 2019	Bank -instalment	112,000
31st Dec., 2019	Hire purchase interest	12,000	31st Dec., 2019	Balance c/d	100,000
		212,000			**212,000**
01st Jan., 2020	Balance b/d	100,000	31st Dec., 2020	Bank -instalment	106,000
31st Dec., 2020	Hire purchase interest	6,000			
		106,000			**106,000**

Dr. **HP sales account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	Hire purchase trading	**500, 000**	01st Jan., 2018	HIRESHI Co. Ltd.	**500, 000**

Dr. **Bank account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2018	HIRESHI Co. Ltd.	**200,000**			
31st Dec., 2018	HIRESHI Co. Ltd.	**118,000**			
31st Dec., 2019	HIRESHI Co. Ltd.	**112,000**			
31st Dec., 2020	HIRESHI Co. Ltd.	**106,000**			

Dr. **Hire purchase interest account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	Profit or loss	**18,000**	31st Dec., 2018	HIRESHI Co. Ltd.	**18,000**
31st Dec., 2019	Profit or loss	**12,000**	31st Dec., 2019	HIRESHI Co. Ltd.	**12,000**
31st Dec., 2020	Profit or loss	**6,000**	31st Dec, 2020	HIRESHI Co. Ltd.	**6,000**

Dr. **Profit or loss account** **Cr.**

Date	Details	Amount	Date	Details	Amount
			31st Dec., 2018	Hire purchase interest	18,000
			31st Dec., 2019	Hire purchase interest	12,000
			31st Dec., 2020	Hire purchase interest	6,000

Balance sheet (extracts) as at 31st December:

Date	Details	Amount
	Current assets:	
2018	Hire purchaser	200,000
2019	Hire purchaser	100,000
2020	Hire purchaser	-

(ii) Using hire purchase interest suspense method:

Dr. **HIRESHI Company Ltd. account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2018	Hire purchase sales	500,000	01st Jan., 2018	Bank (down payment)	200,000
01st Jan., 2018	Hire purchase interest suspense	36,000	31st Dec., 2018	Bank (1st instalment)	118,000
			31st Dec., 2018	Balance c/d	218,000
		536,000			**536,000**
01st Jan., 2019	Balance b/d	218,000	31st Dec., 2019	Bank (2nd instalment)	112,000
			31st Dec., 2019	Balance c/d	106,000
		218,000			**218,000**
01st Jan., 2020	Balance b/d	**106,000**	31st Dec., 2020	Bank (3rd instalment)	**106,000**

Dr. **Hire purchase interest suspense account** **Cr.**

Date	Details	TZS	Date	Details	TZS
31st Dec., 2018	Hire purchase interest	18,000	01st Jan., 2018	HIRESHI Co. Ltd.	36,000
31st Dec., 2018	Balance c/d	18,000			
		36,000			**36,000**
31st Dec., 2019	Hire purchase interest	12,000	01st Jan., 2019	Balance b/d	18,000
31st Dec., 2019	Balance c/d	6,000			
		18,000			**18,000**
31st Dec., 2020	Hire purchase interest	**6,000**	01st Jan., 2020	Balance b/d	**6,000**

Dr. **Hire purchase interest account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2018	Profit or loss	**18,000**	31st Dec., 2018	Hire purchase interest suspense	**18,000**
31st Dec., 2019	Profit or loss	**12,000**	31st Dec., 2019	Hire purchase interest suspense	**12,000**
31st Dec., 2020	Profit or loss	**6,000**	31st Dec., 2020	Hire purchase interest suspense	**6,000**

Balance sheet (extracts) as at 31st December

Date	Details	TZS	TZS
	Current assets		
2018	HIRESHI Company Ltd.	218,000	
	Less: Hire purchase interest suspense	(18,000)	200,000
2019	HIRESHI Co. Ltd.	106,000	
	Less: Hire purchase interest suspense	(6,000)	100,000

Exercise 7.4

1. On 1st January, 2018 MAUA Ltd. sold on hire purchase terms, four (4) tractors to a farming company called KILIMO Ltd. The terms of the contract were as follows:
   (a) Cash price of tractors was TZS 200,000,000.
   (b) TZS 80,000,000 was to be paid on signing of the contract;
   (c) The remaining balance was to be paid in annual instalments of TZS 40,000,000 each plus interest;
   (d) Interest chargeable on the outstanding balance was 6% per annum; and
   (e) Depreciation at 10% per year was to be written-off using the straight-line method.

   Required:

   Using HP Interest method:
   (i) Prepare relevant accounts in the books of KILIMO Ltd.; and
   (ii) Show its resulting balance sheet extract.

2. Mr. Allan commenced business by purchasing a machine on hire purchase terms from Sangasanga Enterprises. He paid an initial deposit of TZS 2,115,000 on 1st January, 2019 and other three annual instalments of TZS 5,000,000 each on 31st December of 2019, 2020 and 2021, respectively.
   The cash price of the machine was TZS 15,000,000. An interest was charged at 8% per annum, on the outstanding balance. The machine was to be depreciated at the rate 10% on the written down value.

   Required
   (i) Show the necessary ledger accounts to record the above transactions in the books of Mr. Allan; and
   (ii) Prepare balance sheet extracts for three years.

3. Achimwene Traders bought a lorry under hire purchase terms on 1st July, 2019 from HATUA Motorways. The cost of the machine was TZS 76,800,000 but under hire purchase agreement Achimwene Traders were required to pay twelve quarterly instalments of TZS 7,600,000 each. The first instalment was to be paid on the date of purchase. Achimwene Traders provides 20% for depreciation on book value of fixed assets and prepares the financial statements on 31st December, of every year. Interest is apportioned through hire purchase interest suspense method, and it is accrued evenly in each instalment.

   Required:

   Prepare the ledger accounts in the books of both parties.

Repossessions of assets

The concept of repossession of assets

Repossession of assets occurs when there is a default in payments contrary to the hire purchase agreement. 'Default' is defined as a failure to meet obligation. Under a hire purchase agreement, the hire purchaser has an obligation to pay up to the last instalment so that the ownership of goods smoothly passes to the purchaser. Failure to meet this obligation, is treated as default on the hire purchaser's part.

Under hire purchase agreement the vendor simply transfers the possession of goods to the hire purchase, not the ownership, until the final instalment is paid. Since the ownership is not transferred, if the hire purchaser fails to pay even the last instalment, the vendor has the legal right to recover the possession of the goods/ properties that were previously sold on hire purchase. This act of recovery of possession is termed as 'repossession'.

Rights of the hire vendor

Rights of the hire vendor to terminate hire purchase agreement occurs when the hirer makes more than one default in payment of instalment as provided in the agreement. In that case, the hire vendor shall be entitled to terminate the agreement by giving notice of termination in writing.

Where a hire purchase agreement is terminated, the hire vendor has the right to:

(i) Enter the premises of the hirer and seize the goods;

(ii) Retain the hire charges already paid and to recover the arrears of hire charges due; and

(iii) Claim compensations for non-delivery of the goods.

Restrictions on the owner

Where the owner seizes the goods lent under a hire purchase agreement, the hirer may recover from the owner the amount, if any, by which the amounts paid in respect of the hire purchase price up to the date of seizure is higher than the value of the goods on the date of seizure. And, where goods have been sold on hire purchase agreement, and the legal amount of hire purchase price has been paid in full, the vendor shall not be allowed to repossess the goods from the hirer, unless by verdict of the court.

Accounting for default and repossession

When the purchaser fails to pay any instalments, the hire vendor has the right to take back the possession of the goods. The amount already paid to the vendor as a part of the payment for the asset is treated as the hiring charge. In making repossession of goods, the vendor can either take back the whole asset (complete possession) or just a part of it (partial possession). The accounting entries in these two scenarios will be passed on the basis of either complete repossession or partial repossession.

Complete repossession

The hire purchaser closes the hire vendor's account by transferring the balance of hire vendor account to hire purchase asset and then finding the profit or loss on repossession. After repossession, the vendor may incur expenses on repossessed stock and may sell them again. The accounting entries are as follows:

S/N	Transaction	Accounting entries
	In the books of the hire vendor	
1.	For closing the account of the purchaser:	Dr. Goods repossessed account xx Cr. Hire purchaser account xx (With the transfer balance)
2.	In case repairs and other expenses are incurred and paid on repossession of goods:	Dr. Goods repossessed account xx Cr. Bank account xx (With repairs and other expenses)
3.	For sale of goods repossessed:	Dr. Bank account xx Cr. Goods repossessed account xx
4.	Any balance left in goods repossessed account is either profit or loss, which is ultimately transferred to profit and loss account:	Dr. Goods repossessed account xx Cr. Income statement xx (With the profit on repossession) or Dr. Income statement xx Cr. Goods repossessed account xx (With the loss on repossession)
	In the books of hire purchaser	
5.	For closing the books of the vendor:	Dr. Hire vendor account xx Cr. Asset account xx
6.	For closing the asset account:	Dr. Income statement xx Cr. Asset account xx (With the loss on repossession) Dr. Asset account xx Cr. Income statement xx (With the profit on repossession)

Example 7.9

On 1st January, 2020, KARUME Ltd. sold a used tractor for TZS 28,000,000 (cash price) to SHAMNBANI WINNERS on hire purchase. Payment was to be made as TZS 7,500,000 cash down payment and three equal instalments of TZS 7,500,000 at the end of each year. Rate of interest was 5% per annum. The rate of depreciation for the asset was 10% per annum on reducing balance method. SHAMBANI

WINNERS made the down payment and managed to pay the first instalment at the end of the year 2020, but could not pay the second instalment. Consequently, KARUME Ltd. repossessed the tractor. KARUME Ltd. spent TZS 300,000 on repairs and disposal of the tractor for TZS 15,350,000.

Required:

Prepare the necessary ledger accounts in the books of the seller and the buyer.

Solution:

In the books of SHAMBANI WINNERS

Dr **Tractor account** **Cr.**

Date	Details	Amount (TZS)	Date	Details	Amount (TZS)
1st Jan., 2020	KARUME Ltd.	28,000,000	31st Dec., 2020	Depreciation	2,800,000
			31st Dec., 2020	Balance c/d	25,200,000
		28,000,000			**28,000,000**
1st Jan., 2021	Balance b/d	25,200,000	31st Dec., 2021	Depreciation	2,520,000
				KARUME Ltd.	14,726,250
				Profit and loss	7,953,750
		25,200,000			**25,200,000**

Dr. **KARUME Ltd. account** **Cr.**

Date	Details	Amount (TZS)	Date	Details	Amount (TZS)
1st Jan., 2020	Cash account	7,500,000	1st Jan., 2020	Tractor	28,000,000
31st Dec., 2020	Cash account	7,500,000	31st Dec., 2020	Hire purchase interest*	1,025,000
31st Dec., 2020	Balance c/d	14,025,000			
		29,025,000			**29,025,000**
31st Dec., 2021	Tractor	14,726,250	1st Jan., 2021	Balance b/d	14,025,000
			31st Dec., 2021	Hire purchase interest**	701,250
		14,726,250			**14,726,250**

*31st December, 2020;

Interest = 5% of TZS 20,500,000 which is (TZS 28,000,000 - TZS 7,500,000)

= TZS 1,025,000

**31st December, 2021;

Interest = 5% of TZS 14,025,000 which is (TZS 20,500,000 – (TZS 7,500,000 + TZS 1,025,000)

= TZS 701,250

In the books of KARUME Ltd.

Dr. **SHAMBANI WINNERS account** **Cr.**

Date	Details	Amount	Date	Details	Amount
1st Jan., 2020	Sales	28,000,000	1st Jan., 2020	Cash	7,500,000
31st Dec., 2020	Hire purchase interest	1,025,000	31st Dec., 2020	Cash	7,500,000
			31st Dec., 2020	Balance c/d	14,025,000
		29,025,000			**29,025,000**
1st Jan., 2021	Balance b/d	14,025,000	31st Dec., 2021	Tractor repossessed	14,726,250
31st Dec., 2021	HP interest	701,250			
		14,726,250			**14,726,250**

Dr. **Tractor repossessed account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2021	SHAMBANI WINNERS	14,726,250	31st Dec., 2021	Cash (sales)	15,350,000
31st Dec., 2021	Cash (repairs)	300,000			
31st Dec., 2021	Profit & loss	323,750			
		15,350,000			**15,350,000**

31st December, 2021; Profit & loss account = Balancing figure

Partial repossession

Sometimes, in case of default, the vendor enters negotiation with the hire purchaser not to repossess the complete goods. Repossessing a part of the goods is called 'partial repossession'. In this case some part of the asset is still left with the buyer.

During partial repossession, interest and depreciation entries are passed as usual in the books of both the parties, but not the entry for payment. These entries are passed up to the date of default.

As some part of the asset is left with the hire purchaser, the hire vendor does not close the hire purchaser's account, nor does the hire purchaser close the hire vendor's account. They ascertain the current value of the asset repossessed with the help of an agreed rate of depreciation (it is usually an enhanced rate). The hire vendor debits the same to the goods repossessed account and credits it to the hire purchaser's account. Similarly, the hire purchaser debits the hire vendor's account and credits the assets account with the agreed value of the asset repossessed. As for the part of the asset not repossessed by the vendor, the hire purchaser applies the normal rate of depreciation and shows the depreciated value as a balance in the asset account. The balancing figure in the asset account will show the profit or loss on default and it will be transferred to the profit or loss account.

Example 7.10

Migombani Car Dealers sold three (3) light commercial vans to Chai Traders on 1st January, 2020 on hire purchase system. The price for each van was TZS 90,000,000, payment of which was to be made as follows:

(a) TZS 30,000,000 down payment for each van; and

(b) The remaining amount be paid in three (3) equal annual instalments of TZS 20,000,000 for a van along with interest at 15% on outstanding balance.

Chai Traders were charging depreciation at 20% each year on reducing balance method. After payment of the first instalment on 31st December 2020, Chai Traders could not pay further instalments. It was agreed between parties to repossess two vans adjusting their values against the amount due. For the purpose of repossession, depreciation at 30% was charged. Repossessed vans were repaired at a cost of TZS 2,000,000 and then all sold for TZS 92,000,000.

Required:

Calculate the value of repossessed vans and prepare accounts in the books of both parties.

Solution

In the books of Chai Traders

Dr. **Light commercial vans account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2020	Migombani car dealers*	270,000,000	31st Dec., 2020	Depreciation *	54,000,000
			31st Dec., 2020	Balance c/d	216,000,000
		270,000,000			**270,000,000**
01st Jan., 2021	Balance b/d	216,000,000	31st Dec., 2021	Depreciation*	43,200,000
			31st Dec., 2021	Migombani Car Dealers*	88,200,000
			31st Dec., 2021	Profit or loss*	27,000,000
			31st Dec., 2021	Balance c/d	57,600,000
		216,000,000			**216,000,000**
01st Jan., 2022	Balance b/d	57,600,000			

Workings:

- 01st January, 2020; Migombani Car Dealers = TZS 90,000,000 × 3 = **TZS 270,000,000**
- 31st December, 2020; Depreciation = 20% of TZS 270,000,000 = TZS 54,000,000
- 31st December, 2021; Depreciation = 20% of TZS 216,000,000 = TZS **43,200,000**
- 31st December, 2021; Migombani car dealers; Cost of two vans less depreciation (2 years)
  = TZS 180,000,000 - [(30% ×180,000,000) + (30% × 126,000,000)]
  = TZS 180,000,000 - [54,000,000 + 37,800,000]
  = TZS 180,000,000 - 91,800,000 = **TZS 88,200,000.**

- 31st December, 2021: Profit or loss (loss on repossession)
  = Cost of two vans less depreciation (first year + second year)

= TZS 180,000,000 - [(20% × 180,000,000) + (20% × 144,000,000)]
= TZS 180,000,000 - [36,000,000 + 28,800,000]
= TZS 180,000,000 - 64,800,000 **= TZS 115,200,000.**
= TZS 115,200,000 - 88,200,000 = Loss on repossession = **TZS 27,000,000/=**

Dr. **Migombani Car Dealers account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2020	Bank*	90,000,000	01st Jan., 2020	Light commercial van	270,000,000
31st Dec., 2020	Bank*	87,000,000	31st Dec., 2020	Hire purchase interest*	27,000,000
31st Dec., 2020	Balance c/d	120,000,000			
		297,000,000			**297,000,000**
31st Dec., 2021	Light commercial van	88,200,000	01st Jan., 2021	Balance b/d	120,000,000
31st Dec., 2021	Balance c/d	49,800,000	31st Dec., 2021	Hire purchase interest*	18,000,000
		138,000,000			**138,000,000**
			01st Jan., 2022	Balance b/d	49,800,000

Workings:

1st January, 2020; Bank = TZS 30,000,000 × 3 (down payment) = **TZS 90,000,000**

31st December, 2020; Bank = TZS 60,000,000 + 27,000,000 (interest) = **TZS 87,000,000**

31st December, 2020 Hire purchase interest = 15% × (TZS 270,000,000 - 90,000,000) = **TZS 27,000,000**
31st December, 2021; Hire purchase interest = 15% × 120,000,000 = **TZS 18,000,000**

In the books of Migombani Car Dealers

Dr. **Chai Traders account** **Cr.**

Date	Details	Amount	Date	Details	Amount
01st Jan., 2020	Sales	270,000,000	1st Jan., 2020	Bank	90,000,000
31st Dec., 2020	Hire purchase interest*	27,000,000	31st Dec., 2020	Bank	87,000,000
			31st Dec., 2020	Balance c/d	120,000,000
		297,000,000			**297,000,000**
01st Jan., 2021	Balance b/d	120,000,000	31st Dec., 2021	Van repossessed	88,200,000
31st Dec., 2021	Hire purchase interest*	18,000,000	31st Dec., 2021	Balance c/d	49,800,000
		138,000,000			**138,000,000**
01st Jan., 2022	Balance b/d	49,800,000			

31st December, 2020; Interest account = 15% of TZS 180,000,000
31st December, 2021; Interest account = 15% of TZS 120,000,000

Dr. **Repossessed commercial van account** **Cr.**

Date	Details	Amount	Date	Details	Amount
31st Dec., 2021	Chai Traders	88,200,000	31st Dec., 2021	Cash (resale)	92,000,000
31st Dec., 2021	Cash (repairs)	2,000,000			
31st Dec., 2021	Profit or loss	1,800,000			
		92,000,000			**92,000,000**

The profit or loss amount on 31st December, 2021 in the Repossessed account is the balancing figure

Exercise 7.5

1. State the meaning of the term "repossession of assets" and explain any three (3) rights to the hire vendor (owner) when the hire purchase agreement is terminated.

2. KWETU Ltd. sold machinery to SHIRATI Ltd. on 1st January, 2019 under a hire purchase agreement. The payments were to be made in four annual instalments of TZS 42,300,000 each, payable at the end of each year. The rate of interest at 5% was to be charged. SHIRATI Ltd. defaulted at the time of the third instalment and KWETU Ltd. repossessed the machinery. SHIRATI Ltd. charged depreciation at 10% per annum on written down value method.

   Required:

   Prepare the necessary ledger accounts in the books of SHIRATI Ltd.

3. Karim Traders purchased some furniture from SOKONI Ltd. on hire purchase system on 1st January, 2018 at a cash price of TZS 60,000,000. Out of the cash price, TZS 15,480,000 was to be paid as down payment and the balance in five instalments of TZS 10,000,000 each. The rate of interest is charged at 4% per annum. Karim Traders could only pay the first instalment. SOKONI Ltd. repossessed the furniture which were revalued and charged depreciation at 15% per annum on straight line method. SOKONI Ltd. incurred TZS 1,500,000 to recondition the goods and then, sold them at TZS 45,000,000.

Required

Open the ledger accounts in the books of SOKONI Ltd.

Final accounts on hire purchase

In hire purchase business, final accounts are also prepared at the end of each accounting period. These include hire purchases statement of profit or loss and statement of financial position. A statement of profit or loss is prepared to ascertain profit or loss on goods sold on hire purchase business. A statement of financial position is prepared to show assets, liabilities and owners' equity.

Example 7.11

JUAKALI Plc. commenced business on 1st January, 2015. The company sells television sets, on hire purchase terms. The hire purchase price including interest is TZS 900,000 for each television set. A customer is required to pay an initial deposit of TZS 225,000 followed by twelve months instalment of TZS 56,250 each. The cost of each television set to JUAKALI Plc. is TZS 600,000.

The following trial balance was extracted from JUAKALI Plc.'s books as 31st December, 2021:

Trial balance as at 31st December 2021

Details	Debit TZS	Credit TZS
Ordinary share capital		75,000,000
Non-current assets	7,500,000	
Purchases	300,000,000	
Annual revenue		180,000,000
Wages and salaries	9,000,000	
General expenses	1,125,000	
Creditors		18,750,000
Bank overdraft		44,250,000
Bank charges	375,000	
	318,000,000	**318,000,000**

During the year ended 31st December, 2021, 400 television sets were sold on hire purchases terms. A dividend of 10% was proposed by the director.

Required:

Prepare the hire purchase income statement for the year ended 31st December, 2021 and a statement of financial position as at 31st December, 2021

Solution

In the books of Juakali plc.

Statement of profit or loss for the year ended 31st December, 2021

Details	TZS	TZS
Sales		360,000,000
Less: Cost of sales		
Opening inventory	-	
Add: Purchases	300,000,000	
Less: Closing inventory	(60,000,000)	240,000,000
		120,000,000
Less: Provision for unrealised profit		60,000,000
Gross profit		**60,000,000**
Less: Expenses		
- Wages and salaries	9,000,000	
- General expenses	1,125,000	
- Bank charges	375,000	(10,500,000)

		49,500,000
Dividends proposed		7,500,000
Profit retained		**42,000,000**

Statement of financial position as at 31st December, 2021

Details	**TZS**	**TZS**
Assets		
Non-current assets		7,500,000
Current assets		
Inventory		60,000,000
Hire purchase debtors	180,000,000	
Less: Provision for unrealised profit	60,000,000	120,000,000
Total assets		**187,500,000**
Equity and liabilities		
Equity		
Ordinary share capital		75,000,000
Profit and loss		42,000,000
Current liabilities		
Trade payables		18,750,000
Dividend payable		7,500,000
Bank overdraft		44,250,000
Total Equity and liabilities		**187,500,000**

Workings:

(i) Unsold stock

$$\text{Number of television sets} = \frac{300{,}000}{600} = 500$$

$$\text{Value of unsold stock} = 600{,}000 \times (500 - 400) = \text{TZS}\,60{,}000{,}000$$

(ii) $$\text{Unrealised profit} = \frac{\text{Outstanding instalment}}{\text{HP selling price}} \times \text{Gross profit}$$

$$\frac{180{,}000{,}000}{360{,}000{,}000} \times 120{,}000{,}000 = \text{TZS}\,60{,}000{,}000$$

Example 7.12

OKA Ltd. commenced business on 1st January, 2020 selling goods on hire purchases and cash system. During the year ended 31st December, 2020 purchases amounted to TZS 270,000,000 and cash sales to TZS310,000,000. In additional the following sales were made under hire purchase arrangement.

Assets	Cost (TZS)	HP selling price (TZS)	Down payment (TZS)	Monthly instalments	Instalments paid
Photocopy machine	3,000,000	4,500,000	500,000	20 of TZS 200,000	8
Motorcycle	4,000,000	6,000,000	600,000	12 of TZS 450,000	2
Sofa set	3,500,000	5,000,000	500,000	18 of TZS 250,000	4

Instalments on sofa set could not be continued, instead, OKA Ltd. repossessed the sofa set after payment of the fourth (4th) instalment. Inventory in trade on 31st December, 2020 amounted to TZS 35,000,000 excluding returned sofa set.

You are required to prepare the following accounts in the books of OKA Ltd:

(i) Hire purchase account;
(ii) General trading account; and
(iii) Memorandum of hire purchase debtors.

Solution

Dr. **Hire purchase account** **Cr.**

Details	Amount	Details	Amount
General trading account	10,500,000	Bank (cash received) (W1)	5,100,000
Hire purchase gross profit	1,650,000	Cost element of goods repossessed (W2)	2,450,000
		Cost element of outstanding instalment. (W3)	4,600,000
	12,150,000		12,150,000

Dr. **General trading account** **Cr.**

Details	Amount	Details	Amount
Purchases	270,000,000	Cash sales	310,000,000
Less: Closing inventory	35,000,000	Hire purchase sales	10,500,000
Cost of goods sold	235,000,000		
General gross profit	85,500,000		
	320,500,000		320,500,000

Dr. **Memorandum hire purchase debtors account** **Cr.**

Details	Amount	Details	Amount
Hire purchase sales		Bank (down payments):	
- Photocopy machine	4,500,000	- Photocopy machine	500,000
- Motorcycle	6,000,000	- Motorcycle	600,000
- Sofa set	5,000,000	- Sofa set	500,000
		Bank – Instalments:	
		- Photocopy machine (8 × 200,000)	1,600,000
		- Motorcycle (2 × 450,000)	900,000
		- Sofa set (4 × 250,000)	1,000,000
		Goods Repossessed (balance on Sofa set)	3,500,000
		Balance c/d	6,900,000
	15,500,000		**15,500,000**

Workings 1: Cash received

Deposit = 500,000 + 600,000 + 500,000 = TZS 1,600,000
Instalments received = 1,600,000 + 900,000 + 1,000,000 = TZS 3,500,000
TZS 5,100,000

Workings 2: Cost element of goods repossessed

Amount received = 500,000 + 1,000,000 = TZS 1,500,000
Amount outstanding = 5,000,000 - 1,500,000 = TZS 3,500,000
TZS 5,000,000

$$\textbf{Cost of goods repossessed} = \frac{\text{Outstanding instalment}}{\text{HP selling price}} \times \text{cost of repossessed item}$$

$$\text{Cost of goods repossessed} = \frac{3{,}500{,}000}{5{,}000{,}000} \times 3{,}500{,}000 = \textbf{TZS 2,450,000}$$

Workings 3: Cost element of stock on hire

Amount received

Photocopy machine = 500,000 + 1,600,000 = TZS 2,100,000
Motorcycle = 600,000 + 900,000 = TZS 1,500,000
= **TZS 3,600,000**

Outstanding instalments = 4,500,000 + 6,000,000 - 3,600,000 = **TZS 6,900,000**

$$\text{Cost of stock on hire} = \frac{6{,}900{,}000}{10{,}500{,}000} \times 7{,}000{,}000 = \text{TZS } 4{,}600{,}000$$

Chapter summary

1. Hire purchase is a method of purchasing goods whereby the hire purchaser enters into an agreement with the hire vendor for the exchange of goods/ properties by paying through a series of regular instalments.
2. Hire purchase method is extensively applied in the acquisition of non-current assets such as equipment, machinery, motor vehicle, and the like, and that the seller has the right to retain ownership of the sold goods/properties until the final instalment is paid by the hire purchaser.
3. The hire purchaser is required to pay a series of instalments over a period of an agreement, and each instalment will comprise the capital amount for the cash price of the asset and interest expense.

4. Interest amount on hire purchase may be calculated using either, straight line method, actuarial method or sum of year digits method.
5. When the asset is purchased on hire purchase, the hire purchaser debits the respective non-current asset account with the total amount of cash price, crediting the hire vendor's account. Interest is recognized and accounted for when instalments become due by debiting the interest account and crediting the hire vendor's account. For the purpose of accounting for initial cash down payment and annual instalments, the hire vendor's account is debited on the relevant date, crediting the bank/cash account.
6. When an asset is sold on hire purchase terms, the vendor debits the hire purchaser's account with full cash price, crediting the hire sales account. The interest amount is debited to hire purchaser's account, when the instalments become due, crediting the hire interest account. Instalment amounts received are credited to the hire purchaser's account, debiting the bank/cash account.
7. Under a hire purchase agreement, the hire purchaser has an obligation to pay up to the last instalment so that the ownership of goods smoothly passes to him/her. Failure to meet this obligation, is treated as default on the hire purchaser's part, and may require the hire vendor to make repossession.

Revision exercise

1. Global motors sell "Boxer '125' Motorcycles" brand new on hire purchases. The total hire purchases price (cash plus interest) for each motorcycle is TZS 3,000,000. Customers are required to pay TZS 1,200,000 as down payment followed by three equal instalments of TZS 600,000 each after every three months. Each motorcycle cost Global motors TZS 2,400,000. The following is trial balance of Global motors as on 31st March, 2019:

Global Motors

Trial balance as at 31st March, 2019

Details	**Dr.** **TZS'000**	**Cr.** **TZS'000**
Capital	-	1,800,000
Equipment	53,000	
Premises	595,000	
Fixtures and fittings	37,000	
Bank	319,000	
Purchases	2,400,000	

Drawings	402,300	
Sales	-	2,700,000
Trade payables	-	750,000
Trade receivables	1,890,000	-
Cash collected from customers	-	810,000
Salaries	300,000	-
General expenses	63,700	-
	6,060,000	6,060,000

During 2019, 900 motorcycles were sold on hire purchases. Global motors prepare financial statements by considering unrealised profit from hire purchases based on uncollected amounts from debtors.

You are required to prepare:

(i) Hire purchases trading account for the year ended 31st March 2019;

(ii) Profit or loss account for the year ended 31st March 2019; and

(iii) Statement of financial position as at 31st March, 2019.

2. Ndatulu Transport Ltd. entered into a hire purchase agreement with XY Finances Ltd. for purchase of two trailer vehicles on 1st January, 2018. The hire purchase selling price of the vehicles is TZS 193,725,000 and the cash selling price is TZS 135,000,000. An initial deposit of TZS 45,000,000 was made on that date to be followed by three annual instalment payments on 31st December:

Period	2018	2019	2020
Instalments (TZS)	49,500,000	49,500,000	49,725,000

The depreciation policy of Ndatulu Transport Ltd. is 20% per annum on straight line method. The hire purchase interest implicit in the sale as used by XY Finance Ltd. is 30% per annum.

Required:

Post the required entries in the general ledger of Ndatulu Transport Ltd. for all the periods covered by the hire purchase transaction. (Make assumption that the total hire purchase interest payable is to be taken into consideration at the beginning of the hire purchase transaction).

3. Hatua farmers purchased five popcorn machines on hire purchase on 1st July, 2018. The cash price of each popcorn machine is TZS 10,000,000. Hatua farmers were required to pay 25% of the cash price as down payment on receipt of the machine

and the balance in five yearly instalments together with interest of 5% per annum. Unfortunately, Hatua farmers failed to pay the third instalment due on 30th June, 2021. It was agreed that two popcorn machines would be returned to the vendor and their values be adjusted against the amount due. The popcorn machines to be returned are charged depreciation at 25% per annum on diminishing balance method. The repossessed popcorn machines were overhauled at a cost of TZS 400,000 and sold for TZS 9,000,000.

Required:
Show necessary ledger accounts in the books of both parties. Books are closed on 30th June, every year, and depreciation at 20% per annum is charged.

4. The SAANANE tour safaris Ltd. purchased from OCEANIC Boat Ltd. a tourist boat on 1st July, 2020 the cash price being TZS 164,000,000. The purchase was on hire purchase basis, TZS 50,000,000 being paid on the signing of the contract and, thereafter, TZS 50,000,000 being paid annually on 30th June, for three years consecutively starting from June, 2021. Interest was charged at 15% per annum.

   Depreciation was charged at the rate of 25% per annum on the reducing balance method. The SAANANE tour safaris Ltd. closes its books every year on 30th June.
   Required: Prepare the necessary ledger accounts in the books of SAANANE tour safaris Ltd.

5. DAIMA Company acquired a plant on hire purchase system from Dar Machinery Ltd., agreeing to pay four annual instalments of TZS 6,000,000 each payable at the end of each year. There is no down payment. Interest is charged at 20% per annum and is included in the annual instalments.

   Because of financial difficulties, DAIMA Company after having paid the first and second instalments, could not pay the third yearly instalment due on 31st December, 2022, whereupon the Dar Machinery Ltd. repossessed the plant.
   DAIMA provided depreciation on the plant at 10% per annum on diminishing balance method.
   Required: Open up the Plant account and the Dar Machinery Ltd. account in the books of Daima Company, assuming that books are closed on 31st December each year.

6. MIMI grocery purchased a smart T.V. set on 1st October 2021 on the hire-purchase system from HAJIS electronics Ltd. The cash price of the set was TZS 1,500,000. Terms of payment were TZS 150,000 down and TZS 400,000 half yearly over two years, the first instalment was to be paid on 31st March, 2022. Rate of interest was 12% per annum.

MIMI grocery wrote off 15% depreciation per annum on reducing balance method and closed its books every year on 31st March. MIMI grocery owners failed to pay the second instalment due on 30th September, 2022 and as a consequence, the T.V. set was repossessed by HAJIS electronics Ltd.

Required: Prepare T.V. set account and the hire vendor's account in MIMI grocery's accounts.

7. On 1st July, 2020 NYANZA Construction Works bought a construction machine from Pap Industries with the cash value of TZS 31,360,000 on hire purchase basis. A sum of TZS 9,000,000 was paid at the time of delivery. The balance was payable in three equal annual instalments of TZS 9,000,000 each payable on 30th June, of every year. Interest was charged at 10% per annum. The NYANZA Construction Works charged for depreciation at the rate of 10% per annum on straight line method.

   NYANZA Construction Works failed to pay the instalment due on 30th June, 2022. Pap Industries obtained the permission of the court to repossess the machine as a result of default by the purchaser and having completed all the statutory requirements the possession of the machine was effected on 30th August, 2022.

   Required: Prepare the necessary ledger accounts in the books of hire purchaser.

Chapter Eight

Cost accounting

Introduction

Organisations incur various costs in their daily operations. However, for a meaningful and informed decision, these costs need to be accumulated in the books, classified, summarised, and reported, so as to assist the management of an organisation and their employees in planning, controlling, performance measurement, and in decision-making. Cost accounting is mainly designed to serve this purpose. In this chapter you will learn about the nature of cost and cost accounting, the concept of break-even point, costing for a manufacturing enterprise and the preparation of a simple cash budget. The competences developed will enable you to identify and properly categorise various costs according to the function, nature, and timing. You will also be able to calculate the break-even points, for profit projections, and prepare a simple cash budget for smooth running of any business enterprise.

Nature of cost and cost accounting

Cost

Business incurs different kinds of costs while manufacturing goods or providing services to its customers. These costs may be associated directly with the products manufactured or services rendered, or indirectly with other activities such as administration, sales, and marketing.

Cost is therefore the monetary measurement of the amount of resources employed in the production of goods or the provision of services. The resources may be tangible such as material and machinery or intangible such as wages, power, and time spent. Therefore, business incur cost by sacrificing resources through the acquisition of assets or payment of expenses.

Cost accounting

Cost accounting refers to systematic set of procedures for identifying, classifying, allocating, aggregating and reporting costs and cost information relating to the production of goods or provision of services and comparing them with the budgeted or standard costs. Cost accounting also involves analysis of variances between the actual and standard costs of a cost unit as well as the assessment of profitability of a cost unit.

Cost object, cost unit and responsibility centres

Cost object: Any activity for which a separate measurement of costs is desired is known as a cost object. It is anything for which cost is to be calculated or which makes a person/firm to incur cost. Examples of cost object include product or service line, a geographical territory, a process, a department or a distribution channel.

Cost unit: A cost unit is a unit of quantity of product, service, or time (or a combination of these) in relation to which costs may be ascertained or expressed. In other words, a cost unit is a standard or unit of measurement of the goods manufactured or services rendered. A cost unit may be expressed in terms of number, length, area, weight, volume, time, or value. For example, per piece, per kilogram, per ton, per gallon, per route, per batch, or per per bag of cement.

Responsibility centres: Usually, managers in an organisation are given responsibility for a particular aspect of operations or activity. These are called responsibility centres. A responsibility centre is an organisation unit headed by a manager or any other appointed person like supervisor or foreman, who is responsible for its activities and results. It is a unit with its clear goals, and objectives, staff, policies and procedures. It is therefore a subset of a business. Typical responsibility centres include cost centres, revenue centres, profit and investment centres.

Cost centres: A cost centre is a department or unit in which costs information is collected and costs established to determine the cost of output produced or service rendered. Classification of cost centres is considered to be important in an organisation as they enable the management to easily prepare budgets and conduct various analyses. Examples of cost centres include a department, a machine or group of machines, overhead costs such as rent, electricity (which later shall be allocated to each department).

Revenue centres: A department or division within the organisation in which revenues are established is called a revenue centre. Managers under this department need information relating to revenues only and there is no measurement of cost or profit. For example, the revenue accountant in a school is only responsible for recording and controlling the different incomes that are received from tuition fees or other revenue sources.

Profit centres: Unlike cost and revenue centres, a profit centre is a department or division within the organisation which is accountable for both cost and revenues. Manager under profit centre wants information regarding both revenues and costs. Managers in profit centres are evaluated on the profit margin achieved by the department.

Investment centres: An investment centre is a department in which the manager is responsible not only for the costs of the division and the revenues that it earns, but also, for decisions relating to the capital investment, and possibly for financing. The performance of an investment manager is usually measured by the returns/ profitability of investments made.

Objectives of cost accounting

Cost accounting is a mechanism of accounting by which costs of services or products are ascertained and controlled for different purposes. Its major goal is to determine the methods by which expenditure on materials, labour and overhead are ascertained, recorded, classified and allocated. This is necessary so that the cost of products and/or services may be accurately established. Specifically the objectives of cost accounting are explained as follows:

Ascertainment of cost: The basic objective of cost accounting is to ascertain the cost of a product, process, operation, job, contract, service or unit of production. This facilitates the management to establish the unit cost or the standard cost for the product or each component of the product.

Determination of selling prices: Cost accounting helps an organisation to set selling prices for its products or services. It involves gathering of cost data which enables the management to analyse the total cost of a product/service and be able to decide the selling price. Thus, the process ensures the selling prices are not set below the full cost per unit.

Ascertain the performance of a business: Cost accounting enables the management to ascertain the performance or profitability of the business. This can be done in terms of product or department. It makes unit cost information available to the management for them to determine the amount of profit earned by every product, thereby allocating the scarce resources to most profitable products.

Determining and controlling efficiency: Cost accounting facilitates the comparison between standard costs and actual costs. Usually actual costs are expected to be lower or at least equal to the standard costs. An analysis conducted to compare the standard costs and actual costs is called variance analysis. The variance is said to be favourable when actual costs are lower than the standard costs, and unfavourable/ adverse variance, when standard costs are lower than the actual costs. Variance analysis enables the management to identify sources of efficiency from the favourable variances or inefficiency from adverse variances. Once the management detects areas of weaknesses, appropriate measures can be taken promptly to eliminate the inefficiencies.

Planning and budgetary control: Cost accounting assists the management in planning process including the preparation of the organisation's budget for its activities. It facilitates the availability of historical cost data which can be used as a basis for future projections. Future costs and projected profit can also be easily estimated. The projections may provide insightful information regarding the need to acquire additional facilities and/

or raise additional finance for operational improvement.

Decision making: Cost accounting helps the management in making short and long term decisions. It enables the presentation of relevant data in a systematic manner and hence speeds up the decision making by the management. This, includes; make-or-buy decision, sell-or-process-further decision, and adding or dropping a product line.

The major differences between cost accounting and financial accounting

Accounting is mainly divided into financial accounting, and cost accounting. While all of them deal with the recording and presentation of financial information, their purposes differ significantly.

The main purpose of financial accounting is to ascertain the financial position of the firm on a given date and the profit or loss for a given period. The users of these financial statements are the stakeholders of the firm, both internal and external. These include the management, owners, investors, creditors, government, etc.

The primary function of cost accounting is to ascertain the costs of every unit in production from the input of raw materials to the output produced. Cost accounting helps the management in important decisions such as fixing the selling price, controlling costs, efficiency measurement, making projections, and budget forecasts. Since cost accounting is mainly fo the internal use, it follows that the main user of cost accounting is the management. For this reason, cost accounting is also referred to as management accounting. While the financial accounting is mainly governed by the accounting standards, the information prepared under cost accounting does not require to comply with any set of rules or standards. However, the management can set its own demarcations for cost information.

Example 8.1:

In cost Accounting:

Total cost of producing one bottle of water of 500 mls is TZS 380. Components of the total costs can be shown as:

Costs	**Amounts in TZS**
Raw materials	120
Labour	190
Other costs (overhead costs)	70
Total cost	**380**

In financial accounting:

If the same bottle of water is sold for TZS 500 and additional cost of selling the bottle is TZS40, then the profit would be shown as:

Details	**Amounts in TZS**
Sales	500
Less: Cost of producing the product	380
Gross profit	120
Less: Selling expenses	40
Profit per bottle	**80**

The following table summarises major differences between financial accounting and cost accounting.

Criteria for comparison	**Cost Accounting**	**Financial Accounting**
Nature	Records the information regarding the cost incurred in the production activities including material cost, labor, and overheads.	Used mainly to provide a historical record of performance and financial position.
Objective	To find out the cost of a product, a project, a process or an activity.	To assess the profitability and financial position of the firm in general.

End-users	Cost accounting is mainly for internal use and it is used by the management including employees, directors, managers among others for their internal assessment and decision making.	Financial accounting is mainly used by external parties including shareholders, lenders and prospective investors, in evaluating the performance of the firm and making sound decisions thereafter.
Frequency	It is prepared and reported to the management as and when required.	It is prepared at the end of the accounting period, which is usually one year.
Coverage	Analyses operations divided by segments (operational or geographical), division, projects, products, activities, processes etc.	Analyses the financial performance and position of a firm as a whole.
Measurement of profit	It measures the profit for a product or process	It measures the profit for the whole entity for a combined entity.
Reporting	Cost accounting reports are prepared to internal use by the management, and it is not mandatory to prepare any cost statements for public consumption.	Public companies are obliged to share to the public the financial statements which are prepared as a part of financial accounting.
Format	No specific format is used, the intention is to record all the important information	Financial statements are prepared in accordance with the International Accounting Standards (IASs) and International Financial Reporting Standards (IFRS).

Reports	In cost accounting variance analysis, marginal cost, break-even analysis reports are prepared.	In financial accounting the income statements, statements of financial positions, and cash flow statements are prepared.
Stock	The stock is valued at cost	The stock is valued at cots or net realizable value, whichever is less.

Cost classifications

In cost accounting, cost may be categorised in different ways to cater for the purpose of the reports to be produced at a given moment. Costs may be categorised into classes which are useful for planning, budgeting, and cost control, while other costs may be categorised into classes useful for making short-term and long-term decisions.

Generally costs are classified according to:

(i) function,
(ii) nature,
(iii) timing of charges
(iv) behaviour,
(v) relevance; and
(vi) responsibility

Classification by function:

Manufacturing costs: Are the costs incurred in manufacturing products for sale. They include, cost of the raw materials, factory cost and factory supervisors' salaries. Others are rental costs for the factory building and the cost of depreciation of factory machinery.

Administration costs: Are the costs of providing administration services for the company. Examples are executives' salaries, legal expenses, office rental costs, the costs of heating/cooling and lighting for the administration offices, the depreciation costs of equipment used by the administration departments and costs of office stationery.

Selling and distribution costs: Are the costs incurred in creating demand for products or services and securing firm contracts and orders from customers and those relating to delivering goods to customers. Examples include: selling and distribution departments' wages and salary; sales commissions for sales representatives; advertising costs, fuel costs and vehicle repair costs for the delivery vehicles; and depreciation for the delivery vehicles.

Costs that do not fall into these classifications might be categorised as general overheads or even classified on their own for example research and development costs and financing costs. Research costs are the costs incurred by the management in searching for new or improved products, whereas development costs are those relating to production of a new or improved product and the commencement of full manufacture of the product. Financing costs are costs incurred to finance the business, such as loan interest, and bank overdraft charges. Finance costs might be included in general administration costs.

Classification by nature:

Direct costs: Are costs that can be traced in full to the product or service. Direct cost is directly attributable to a specific cost object. Direct cost are further categorised into direct materials, direct labour and direct expenses as follows:

Direct material costs: consist of raw materials and components produced or purchased from an external supplier used directly in the manufacture of a product or the provision of a service. For example, timber in manufacturing furniture, leather in manufacturing shoes.

Direct labour costs: human efforts used in production which can be specifically and exclusively identified in making a product or provide a service. Example of direct labour costs are the wages for machine tool operators in a machine shop. These costs can be established by measuring the time taken for a job, or the time taken in direct production work.

Direct expenses: expenses which are incurred on a specific product other than direct material cost and direct labour cost. Direct expenses include cost of hiring tools or equipment for production and maintenance costs of tools, fixtures used in production.

The total of direct materials, direct labour and direct expenses is referred to as prime costs.

Indirect costs: Are also known as overheads. These cannot be identified specifically and exclusively with the making of a product or rendering of a service. Overheads can be further categorised into production and non-production overheads. Production overheads include all the costs of manufacturing apart from direct costs. They consist of indirect labour, indirect materials and other indirect expenses. Non-production overheads include administration and selling as well as distribution overheads.

Conversion cost: Is the sum of direct labour and manufacturing overhead costs. It represents the cost of converting raw materials into finished products.

Classification by timing of charges against sales value

Product costs: Are the costs incurred in relation to production of product and charged against the revenue when the product is sold i.e. cost of goods sold. Product costs are usually included in the value of inventory. These costs are also known as inventoriable costs.

Period costs: Are all other costs which are expensed as they are incurred, hence are charged against sales revenue in the period in which the revenue is earned. Unlike product cost, period costs are not included in the value of inventory. Non-manufacturing costs like selling, general and administrative expenses are period costs.

Classification by behaviour:

Costs may be classified into fixed and variable costs based on their behavior towards changes in the activity levels of product. The volume of activity may be the units of sales, the units of production, total labour hours worked, and machine hours worked. This distinction is important as it helps managers to make crucial decisions such as manufacturing a component in-house or buying it from outside vendors. It also helps to decide whether to continue the business or shut down.

Fixed costs: Are costs which remain constant at each level of production. Total fixed costs do not change with the changes in activity level or output. These include costs such as rent of office building, depreciation of building and machinery, corporate taxes, salaries for the management, interest on loans and legal or audit fees. Fixed costs can be categorized into total fixed costs and unit fixed costs (fixed cost per unit).

Total fixed costs: the total fixed cost usually remain constant over a certain period of time, regardless of the volume of production or sale. For example, if the firm pays rent at TZS 300,000 per month for the factory building, such rent will be paid as agreed, regardless of whether a firm produces any goods or services. Figure 8.1 below provides the graphical presentation of fixed cost behaviour.

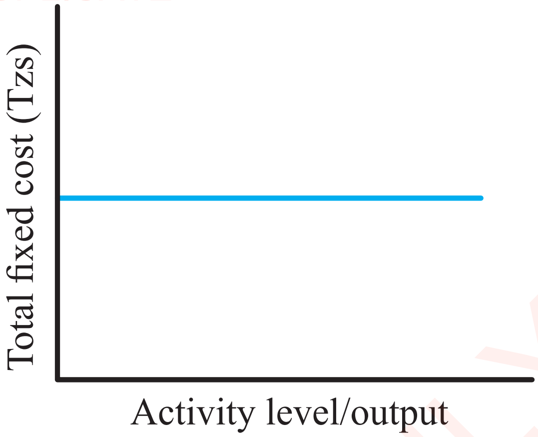

Figure 8. 1: *Graphical presentation of total fixed cost*

As presented in figure 8.1, a company's total fixed costs don't vary with the volume of production. Fixed costs are also unavoidable. As long as the firm continues to exist, it must incur fixed costs. Most of fixed costs are indirect, that they generally cannot be traced directly to the units produced.

For example, suppose Kilimani Company has a fixed cost of TZS 10,000,000 per month to rent the machine it uses to produce bricks. If the company does not produce any bricks for the month, it still needs to pay the TZS 10,000,000 for rent of the machine. But even if it produces one million bricks per month, its fixed cost will still remain the same.

The more fixed costs a company has, the more revenue a company needs in order to break even, which means it needs to work harder to produce and sell its products. To break-even means to be in a situation where total revenue equals to total costs.

Fixed cost per unit: While total fixed costs remain the same at all levels of production, the fixed costs per unit change on the basis of the number of units produced. So, when production level increases, the fixed costs per unit drop. In this way, a company may achieve economies of scale by increasing production, hence lowering costs.

For example, assume again that Kilimani Company has to pay TZS 10,000,000 per month to rent the machine it uses to produce bricks. The normal production rate per month is 40,000 bricks. As such, the fixed cost of the machine rent is TZS 250 per brick produced. If the firm increases production to 50,000 bricks per month, the fixed cost per unit will fall to TZS 200. A graphical presentation of fixed cost per unit behaviour is presented in figure 8.2.

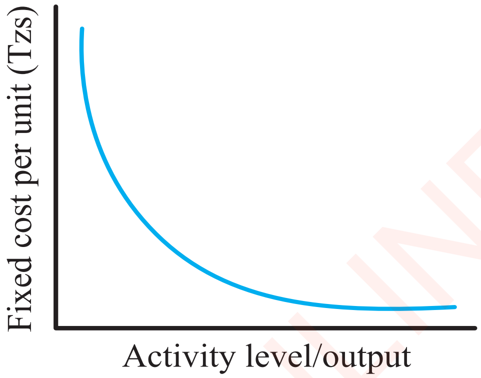

Figure 8. 2: *Graphical presentation of average fixed cost per unit*

Variable costs: Are costs whose total change in a direct proportion with changes in activity level. The change is the same amount for each additional unit of product that is manufactured or each additional unit of service that is rendered. Variable costs are directly associated with the number of goods or services produced. This means, a company's total variable costs increase and decrease with its production volume. Examples of variable costs include, cost of raw materials, and direct labour cost. Others are utility bills, commissions on sale and costs of packaging materials. Variable costs are also categorized into total variable costs and variable costs per unit.

Variable costs per unit: The variable cost per unit remains the same over a period of time. When production volume goes up or goes down, the variable cost per unit will remain the same.

Suppose that Kilimani Company incurs the following costs to produce each brick:

- Sands cost	–	150
- Cement cost	–	450
- Water cost	–	100
- Labour charge	–	120

The variable cost per unit of brick will therefore be TZS 820. Variable cost per unit remains constant at all levels of activity. The graphical presentation of variable cost per unit behaviour is presented in figure 8.3.

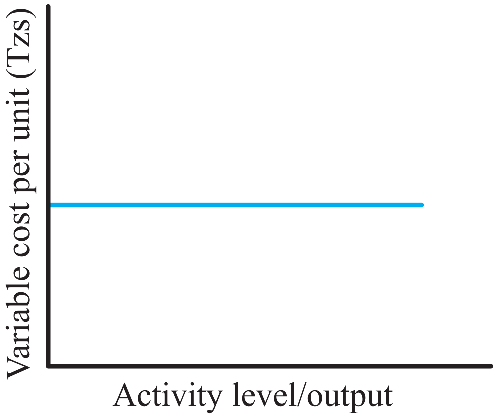

Figure 8. 3: *Graphical presentation of variable cost per unit*

Total variable costs: The total variable costs changes in a direct proportion with the level of production. If production increases by 15% for example, the total variable costs will also increase by 15%. Similarly, if production level doubles, the total variable costs also double. For example, if the company produces 5,000 bricks, at a cost of TZS 820 per unit, its total variable cost will be TZS 4,100,000. But, if the company doesn't produce any bricks, it won't have any variable costs, hence its total variable cost will equal zero. Similarly, if the company produces 10,000 bricks, the cost will rise to TZS 8,200,000. Figure 8.4 presents the linear behaviour of total variable costs.

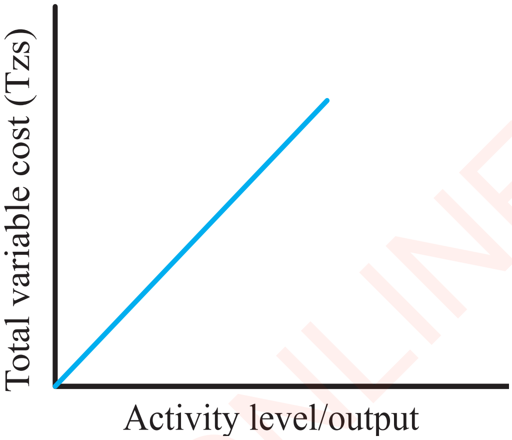

Figure 8. 4: *Graphical presentation of total variable costs*

Semi-variable costs: Apart from fixed costs and variable costs, there also exist some costs which have elements of both fixed and variable costs. These are called semi variable costs. It is a cost that a cost that remains fixed up to a certain level of production and changes with the change in the volume of production beyond this level. The fixed part is the base level cost that is always incurred, while as the variable portion of the cost is an additional cost which changes as the volume of production changes.

An example of semi-variable cost is the popular charges made by mobile network providers on minutes and internet packages. For example, a mobile networks may provide 5 GB of internet at TZS 10,000 per month. This TZS 10,000 is a fixed cost per month which will not change unless user consumes more data than 5 GB. In case the data usage exceeds 5 GB in a month, and has a balance of money in the phone, then each extra MB consumed will be charged separately. The charges on extra MBs will represent the variable costs. This charge will be proportional to the amount of extra data thatwere used. Electricity usage charges may also be provided under certain tariff zones, beyond which extra charges apply. For example a user under a certain tariff zone might be given a certain number of units per month, for a certain charge. If this customer exceeds the given units in a month, extra charges per extra unit consumed will be applied.

The semi-variable costs can thus be separated into two parts. The fixed cost portion and the variable portion:

Semi-variable cost = Fixed cost + variable cost

Variable cost per unit = change in cost/ change in output

Note:
The semi-variable cost is also called the mixed cost or semi-fixed cost.

Classification by their relevance:

Standard cost: The standard cost is a predetermined unit cost of production or operating. It is a target cost that is desired. The standard cost forms a basis for variance analysis as it is compared with the actual cost to measure the performance of an organisation or its division.

Incremental cost (or differential cost): The incremental cost is the difference in costs between two or more alternatives. For example to manufacture product X we need material A which costs TZS 500,000, altenatively, material B which costs TZS 650,000 may be used. The incremental cost in this case is the difference i.e TZS 150,000.

Sunk cost: A sunk cost is a past cost which is not relevant in decision making. For example amount spent to acquire machinery. They have already been incurred and total cost will not be affected by any decision made now or in the future.

Relevant costs: These are expected future costs that will be incurred in pursuing two or more alternative courses of action. The incremental costs are considered to be relevant for decision making. Relevant costs are also known as differential or avoidable costs

Opportunity cost: An opportunity cost is the net revenue (or benefit) forgone by rejecting an alternative. For example, a transportation company which has a choice of using its buses or renting it out for TZS 1,000,000, will incur an opportunity cost of TZS 1,000,000 if it will decide to use the bus.

Exercise 8.1

1. Define the term "cost accounting".
2. Briefly explain five (5) objectives of cost accounting.
3. Business incurs different kinds of costs while manufacturing goods or providing services to its esteemed customers. These costs may be associated directly with the products manufactured or services rendered or they may relate to other organisation's activities such as administration, sales and marketing.

   Required: Examine different ways in which costs are classified.
4. Accounting helps the management to accumulate financial information for use in making economic decisions. This can be achieved through financial accounting system and/or costing accounting system.

   Required:
   Compare and contrast between financial accounting and cost accounting.

1. Classify the costs in the following table under the cost column as direct material (DM), direct labour, (DL), direct expenses (DE) or indirect (ID) costs. Please use the letters written in brackets to indicate your correct classification in the classification column.

	Cost	Classification		Cost	Classification
a)	Cost of raw materials for goods		h)	Supervisors' wages in factory.	
b)	Fringe benefits		i)	Glue in tube making	
c)	Rent of factory buildings.		j)	Wood in making furniture	
d)	Royalty paid for each item manufactured.		k)	Cost of hiring special machinery for production	
e)	Wages of factory machine operators		l)	Taxes	
f)	Depreciation of machinery in factory.		m)	Salary of School bursar	
g)	Lubricants for machines		n)		

3. Classify the costs indicated in the following table as either manufacturing (M), selling (S), or administrative (A) expenses in terms of their functions. Please use the letters written in brackets to indicate your correct classification in the classification column.

	Cost	Classification		Cost	Classification
a)	Production materials Banners and fliers		i)	Bad debts	
b)	Legal expenses		j)	Freight-in	

c)	Lighting on general office building		k)	Employer's payroll contributions – factory	
d)	Accounting expenses		l)	Employer's payroll contributions -sales office	
e)	Cost of idle time		m)	Chief executive officer's salary	
f)	Promotions		n)	Advertising	
g)	Freight-out		o)	Small tools	
h)	Furniture's sanding materials		p)	Cost of machine breakdown	

5. The following cost data was extracted from the books of MVUMI Company Ltd.

	Item	**TZS**
-	Direct materials used	2,000,000
-	Direct labour	3,000,000
-	Factory overhead (all indirect, 40% variable)	1,500,000
-	Selling and administrative expenses (40% fixed, 60% variable)	2,400,000

Required:

Use the provided information to compute:

(a) Prime cost;
(b) Direct cost;
(c) Product cost;
(d) Variable cost;
(e) Conversion cost;
(f) Indirect cost;
(g) Period expense; and
(h) Fixed cost.

Break even analysis

Break-even analysis is the study of the interrelationships between costs, volume and profit at various levels of activities. This analysis examines the effects on future profit which may result from changes in fixed cost, variable cost, sales price, quantity and quantity mix if a company is producing more than one product.

Assumptions underlying the Break-even analysis

A number of assumptions are made to ensure that the analysis can be carried out. The important assumptions are:

(a) All costs can be classified into fixed and variable components.

(b) Total fixed cost remains constant at all levels of output.

(c) Total costs and total revenue are linear functions of output.

(d) Profits are calculated on a variable costing basis, i.e., contribution minus fixed costs.
(e) Sales price per unit remain constant.
(f) Sales volume or output is the only factor affecting costs.
(g) All outputs are sold, or there is no change in inventory levels.

Break-even point

A business may be selling a large amount of the products to incredible customers. This is not a proof that, such a business makes profit. It needs an understanding of important analysis, which can be undertaken to determine the total cost incurred versus the revenue, so as to know if they are really making profit or just selling many products. A break-even analysis, is the calculation that allows business owners to figure out reasonable quantity of the product to be sold, and to come up with pricing strategies that will be able to cover the total costs incurred, and generate a profit thereon.
A break-even point is the level of activity at which the company is making neither profit nor loss. At this point the total costs is equal to the total revenue. Usually the management is very much interested to know the activity level at which there is neither profit nor loss. This is because, the break-even point helps the management to ascertain the cost of doing business and the relevance of the prices they charge.

Calculating the break-even point

The break-even point (BEP) can be calculated arithmetically from the following formula:

$$\text{BEP in units} = \frac{\text{Total Fixed Cost}}{\text{Selling price per unit - Variable cost per unit}}$$

But: Selling price per unit – Variable cost per unit = **Contribution margin per unit**

Hence: $$\text{BEP in amounts} = \frac{\text{Total Fixed Cost}}{\text{Contribution margin per unit}} \times \text{Selling price per unit}$$

Alternatively:

$$\text{BEP in amounts} = \text{Break-even point in units} \times \text{Selling price per unit}$$

Example 8.2

The following information extracted from DQP Ltd. relates to the production projections of Blue pure drinking water for the forthcoming year of production:

Details	Units	TZS
Expected sales (bottles)	7,000,000	-
Selling price per unit	-	500
Variable cost per unit	-	300
Total Fixed costs	-	150,000,000

Required:

Compute the break-even point in units and in TZS.

Solution

$$\text{BEP (units)} = \frac{\text{Total fixed cost}}{\text{Selling price per unit - Variable cost per unit}}$$

$$\textbf{BEP (units)} = \frac{150{,}000{,}000}{500 - 300} = \frac{150{,}000{,}000}{200} = \textbf{750,000 units}$$

$$\textbf{BEP in revenue} = \text{BEP in units} \times \text{selling price per unit}$$

$$= 750{,}000 \times \text{TZS } 500 = \text{TZS } 375{,}000{,}000$$

This means DQP Ltd. has to produce and sell at least 750,000 bottles of water, to be able to cover the total costs (variable costs and fixed costs). Note that, at this level of sales, they will not be able to earn any profit, but just cover the costs (no profit, no loss level).

Contribution margin

Contribution can be simply defined as the amount remaining to cover fixed cost, after deducting the variable costs from sales. Arithmetically, contribution is obtained by taking sales minus variable costs. Under the variable costing system, total profit is equal to total contribution minus fixed costs. Contribution can also be calculated for each unit, as selling price per unit minus variable cost per unit.

Contribution margin ratio

Contribution margin ratio is a measure of how much contribution is earned from each TZS 1 of sales. This is also called contribution to sales ratio and it is expressed as a percentage of contribution to sales or contribution per unit to selling price per unit. The contribution margin ratio can be calculated using the contribution margin per unit, or the total contribution as follows:

$$\text{Contribution margin ratio} = \frac{\text{Contribution margin per unit}}{\text{Selling price per unit}} \times 100 \text{ or}$$

$$\text{Contribution margin ratio} = \frac{\text{Total contribution margin}}{\text{Total sales}} \times 100$$

Breakeven point in amounts can also be calculated by using the contribution margin ratio as follows:

$$\text{BEP in amounts} = \frac{\text{Total fixed cost}}{\text{Contribution margin ratio}}$$

After obtaining the BEP in amounts, BEP in units can be calculated by dividing the BEP in revenue with the sales price per unit, if it is known.

Example 8.3

BABU Traders makes a product BABU juice, which has a variable cost of TZS 400 and a selling price of TZS 500 per unit. Budgeted fixed costs are TZS 4,200,000.

Required:

(a) Calculate the contribution margin ratio

(b) Calculate the volume of sales required to break-even using the contribution margin ratio

Solution

(a) Contribution margin

= Selling price per unit – Variable cost per unit

= TZS 500 – TZS400 = TZS 100

$$\text{Contribution margin ratio} = \frac{\text{Contribution margin per unit}}{\text{Selling price per unit}} \times 100$$

$$\text{Contribution margin ratio} = \frac{\text{TZS 100}}{\text{TZS 500}} \times 100 \ = \mathbf{20\%}$$

(b) Volume of sales required to break-even

$$\text{BEP in units} = \frac{\text{Break-even point in amounts}}{\text{Selling price per unit}}$$

But:

$$\text{BEP in amounts} = \frac{\text{Total Fixed Cost}}{\text{Contribution Margin Ratio}}$$

$$\text{BEP in amounts} = \frac{\text{TZS } 4{,}200{,}000}{0.2} = \text{TZS } 21{,}000{,}000$$

$$\text{BEP in units} = \frac{\text{TZS } 21{,}000{,}000}{\text{TZS } 500} = \textbf{42,000 Units}$$

Margin of safety

The margin of safety is the difference between the budgeted sales and the break-even amount of sales. The margin of safety formula is equal to targeted/budgeted sales level minus the break-even sales, divided by the targeted/budgeted sales level. It is usually expressed as a percentage.

$$\text{Margin of safety} = \frac{\text{Budgeted sales - BEP in amounts}}{\text{Budgeted sales}} \times 100$$

It is called margin of safety because it is the maximum amount by which actual sales can be lower than budgeted sales without incurring a loss for a particular period. A high margin of safety therefore indicates a low risk of making a loss.

Example 8.4

ARORA Company Ltd. budgets to sell 40,000 units of its product Arora toilet soaps in the year to December, 2023. Arora toilet soap has a selling price of TZS 2,000 and a variable cost of TZS 1,500. Fixed costs for the period are expected to be 12,500,000.

Required: Calculate the expected margin of safety for ARORA Company Ltd. for the year 2023.

Solution

Margin of safety = Budgeted sales – Break-even sales

The break-even point = TZS 12,500,000/(TZS 2,000 – 1,500) = 25,000 units.

The budgeted sales are 40,000 units.

= 40,000 – 25,000 = 15,000

Margin of safety = 15,000 units

The margin of safety is often expressed as a percentage of budgeted sales as:

$$\text{Margin of safety} = \frac{\text{Budgeted sales - BEP in amounts}}{\text{Budgeted sales}} \times 100$$

$$= \frac{\text{TZS } 40,000 - 25,000}{\text{TZS } 40,000} \times 100$$

$$= \frac{\text{TZS}15,000}{\text{TZS}40,000} \times 100 = 37.5\%$$

This means, the company will start making loss if it allows its sales volume to decrease by 37.5% or more. Otherwise, the sales volume can decrease and the company still makes profit.

Break-even chart

Managers may also obtain an understanding of break-even analysis if the information is presented in graphical format. A graphical presentation of break-even analysis is also known as the break-even chart. Break-even charts are used by managements to: plan the production of a company's product; market a company's products; and give a visual display of break-even arithmetic. With the break-even chart the sales and fixed costs are plotted. The total cost line is derived by adding variable costs to fixed costs, and it is drawn parallel to the variable cost line because fixed costs are assumed to be a constant sum throughout the output range.

The intersection of the sales line and the total costs line is the break-even point. This is the point where total costs are matched exactly by total revenue. The distance between the break-even point and the expected (or budgeted) sales in units, indicates the margin of safety. The break-even charts do not highlight the profit or loss at different output levels and must be ascertained by comparing the differences between the total cost and total revenue lines.

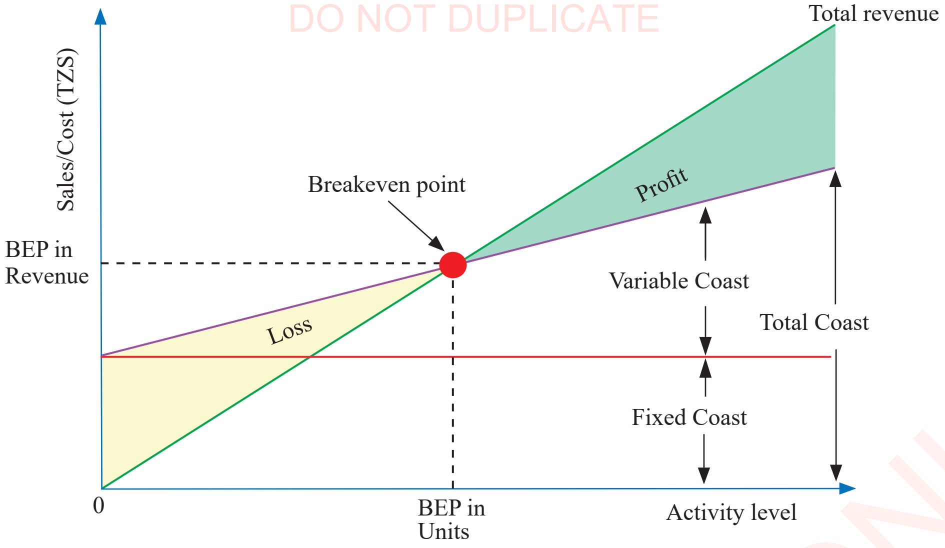

Figure 8. 5: *Break-even chart*

Example 8.5

NAG Ltd. is a firm dealing with the production and distribution of biscuits, which are packed in small packets of 200 grams each. The budgeted annual output of NAG Ltd. is 4,000 packets. The fixed overheads amount to TZS 1,000,000 and the variable costs are TZS 500 per packet of biscuits. After being well packed, each packet is sold at TZS 1,000.

Required:

(a) Use the provided information to create a table showing the amounts for all variables at different production levels up to the present maximum capacity.

(b) Construct a break-even chart showing the current break-even point and profit earned up to the present maximum capacity.

Solution

(a) **A table showing the amounts for all variables at different production levels**

UNITS	FC	TVC	TC	SALES	PROFIT
-	1,000,000	-	1,000,000	-	-1,000,000
500	1,000,000	250,000	1,250,000	500,000	-750,000
1,000	1,000,000	500,000	1,500,000	1,000,000	-500,000
1,500	1,000,000	750,000	1,750,000	1,500,000	-250,000
2,000	**1,000,000**	**1,000,000**	**2,000,000**	**2,000,000**	**0**
2,500	1,000,000	1,250,000	2,250,000	2,500,000	250,000
3,000	1,000,000	1,500,000	2,500,000	3,000,000	500,000
3,500	1,000,000	1,750,000	2,750,000	3,500,000	750,000
4,000	1,000,000	2,000,000	3,000,000	4,000,000	1,000,000

From the table created, NAG Ltd. will break-even at the level of 2,000 units, at which point the total cost is TZS 2,000,000, and total revenue is also TZS 2,000,000.

(b) **Break-even chart**

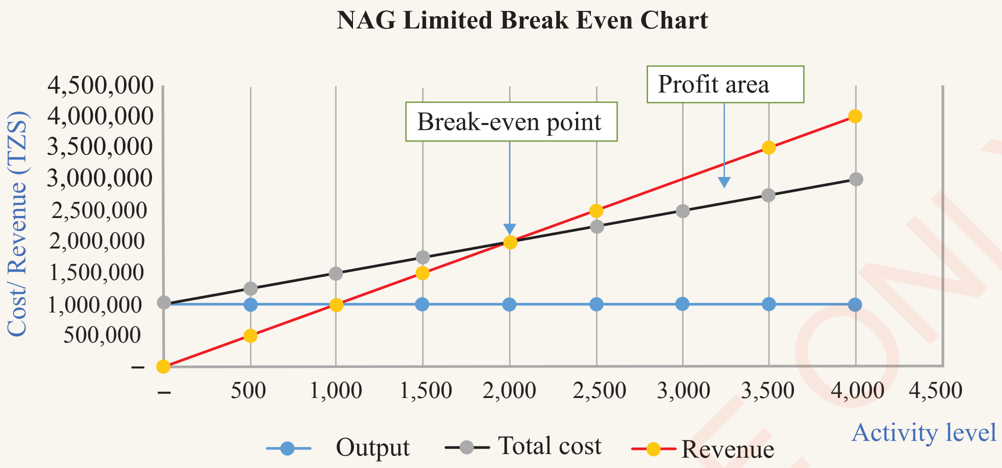

Figure 8. 6: *NAG Ltd.'s break-even chart*

The break-even chart indicates that NAG Ltd. will start earning profits at the level of 2,000 units and above. This is because from the break-even point, the total revenue is higher than the total cost.

Exercise 8.2

1. The following information is given for SDX Ltd. which produces Gelti baby diapers: -

Sales (TZS 8,000 per unit)	120,000,000
Variable expenses	75,000,000
Total fixed costs	24,000,000

You are required to calculate:

(a) Contribution margin per unit
(b) Contribution margin ratio
(c) BEP in units and revenue
(d) Margin of safety

2. UZV Ltd. manufactures a product called Saal skin care which has a selling price of TZS 12,000 per unit and a variable cost of TZS 8,800 per unit. The company

incurs annual fixed costs of TZS 48,800,000. Annual sales demand is 18,000 units. The company is planning to invest on a new technology which would cause a TZS 1,200,000 increase in fixed costs and a reduction in variable cost by TZS 1,800 per unit. The new production methods would result in a superior product and would enable sales to be increased to 20,000 units per annum at a price of TZS 15,000 each.

Required

(a) Calculate the BEP in units before and after the investment in new technology.

(b) Calculate the margin of safety before and after the investment in new technology.

3. The DQP Ltd. manufactures a soft drink known as fresh juice. The following data relates to the production for the coming year:

Details	**Units**	**TZS**
Estimated annual sales	50,000	
Selling price per unit		800
Estimated costs:		
Direct materials cost per unit		160
Direct labour cost per unit		120
Factory overhead cost per year - all fixed		4,800,000
Administrative expenses per year all fixed		6,400,000
Selling expenses: (25% of sales)		

Required: Calculate the break-even point in units and in revenue/amounts

5. The budgeted annual output of DSR Ltd. for the forthcoming year of production is 20,000 units. The fixed overheads amount to TZS 16,000,000 and the variable costs are TZS 22,000 per unit. The selling price is TZS 30,000 per unit.

Required:

Construct a break-even chart showing the current break-even point and profit earned up to the present maximum capacity.

6. KIRUMBA Processing Company is a business firm dealing with processing, packaging and exportation of sangara fish fillet to almost all the East and Central African countries. The budgeted annual output of KIRUMBA Processing Company is 4,000,000 kilograms. The fixed overheads amount to TZS 850,000,000 and the variable costs are TZS 6,500 per kilogram. The selling price is TZS 8,000 per kilogram.

Use the provided information to:

(a) Create a table showing the amounts of variable costs at different production levels up to the present maximum capacity.

(b) Construct a break-even chart showing the current break-even point and profit earned up to the present maximum capacity.

Cost accounting for manufacturing enterprise

The income statement of a manufacturer is not very different from the income statement of a merchandiser. The important characteristic of the income statement for a manufacturer is that it is supported by a schedule of cost of goods manufactured. This schedule is also known as the cost sheet. It presents all cost that have been used to produce finished goods namely direct materials, direct labour, and factory overheads. The cost sheet also presents inventories relating to direct materials and work-in-process, and finished goods. The cost of goods manufactured is then transferred to company's income statement for the assessment of the performance of an organisation as a whole. The following is a presentation of the costs in the cost sheet of goods manufactured by NEWALA Company Ltd. for the year ended 31st December, 2021.

NEWALA Company Ltd.

Schedule of cost of goods manufactured for the year ended 31st December, 2021

Particulars	Amount	Amount
Cost of direct materials used in production		
Opening stock at 1st January, 2021	20,000,000	
Add: Purchases of direct materials	124,000,000	
Cost of direct materials available for use	**144,000,000**	
Less: Closing stock at 31st December, 2021	16,400,000	127,600,000
Add: **Other direct costs**		
Direct labour cost		36,000,000
Direct expenses		12,400,000
Prime cost		**176,000,000**
Add: **Production overheads:**		
Indirect manufacturing labour	28,800,000	
Factory supplies	40,000,000	
Factory rent	32,000,000	
Depreciation of factory equipment	12,400,000	
Depreciation of factory building	10,800,000	124,000,000

Production cost for the year to 31st December, 2021		**300,000,000**
Add: Work-in-progress at 1st January, 2021		80,000,000
Total production cost to account for		**380,000,000**
Less: Work-in-progress at 31st December, 2021		120,000,000
Cost of goods manufactured *(to income statement)*		**260,000,000**

Example 8.6

The following information relates to the PASUA Company Ltd. for the year for the ended December 31, 2021.

Details	Amount (TZS '000')
Opening stock of raw materials	20,000
Opening stock of work in progress	10,000
Opening stock of finished goods	50,000
Raw materials purchased	500,000
Direct wages	380,000
Sales for the year	1,200,000
Closing stock of raw materials	75,000
Closing stock of work in progress	15,000
Closing stock of finished goods	35,000
Factory overhead	80,000
Direct expenses	50,000
Office and administrative overhead	60,000
Selling and distribution expenses	30,000

Required:

Prepare PASUACompany Ltd.'s schedule of cost of goods manufactured and income statement for the year ended 31st December, 2021.

Solution

In the books of PASUA Company Ltd.

Schedule of cost of goods manufactured for the year ended 31st December, 2021

Particulars	**TZS '000'**	**TZS '000'**
Cost of direct materials used in production		
Opening inventory of raw materials	20,000	
Add: Raw materials purchased	500,000	
Cost of raw materials available for production	520,000	
Less: Closing inventory of raw materials	75,000	445,000
Add: Other direct costs		
Direct wages		380,000
Direct expenses		50,000
Prime cost		**875,000**
Add: Factory overhead		80,000
Production costs incurred during the year ended 31st December, 2021		**955,000**
Add: Work-in-progress at 1st January, 2021		10,000
Total production cost to account for		**965,000**
Less: Work-in-progress at 31st December, 2021		15,000
Cost of goods manufactured *(to income statement)*		**950,000**

Income statement for the year ended 31st December, 2021

Particulars	**TZS '000'**	**TZS '000'**
Sales		1,200,000
Less: Cost of goods sold		
Opening stock of finished goods	50,000	
Add: Cost of goods manufactured	950,000	
Less: Closing stock of finished goods	1,000,000	
Gross profit	35,000	965,000
Office and administration overhead		235,000
Selling and administration overhead	60,000	
Profit	30,000	90,000
		145,000

Exercise 8.3

1. The following information relates to OXT Ltd. a manufacturer of shoes during February, 2021

Details	
Raw materials consumed	TZS 20,000,000
Direct wages	TZS 12,000,000
Machine hours worked	1,000 hours
Machine hourly rate	TZS 2,000 per hour
Office overhead	20% on works cost
Selling overhead	TZS 400 per unit
Units produced	20,000 units
Units sold	18,000 units
Unit sales price	TZS 3,000

Required:

Prepare OXT Ltd. schedule of cost of goods manufactured and income statement for February, 2021.

2. The following information relates to HDC Ltd. a manufacturer of Tamu cooking flour during April, 2021:

(a) Direct raw materials TZS 160,000,000
(b) Direct wages TZS 90,000,000
(c) Machine hours worked 6000
(d) Machine hour rate TZS 6,000
(e) Office overhead 15% of work cost
(f) Selling overhead TZS 2,000 per unit
(g) Units produced 5000 units
(h) Units sold 5,000 units at TZS 80,000 each

Required:

Prepare HDC Ltd. schedule of cost of goods manufactured and income statement for April, 2021.

A cash budget

Cash budget is a detailed estimates of cash flows (cash receipts and disbursements) during the budget period. The cash budget presents the expected cash inflows and outflows for a specific period. It helps management to maintain adequate liquidity position of the organisation and keep cash balances in reasonable relationship to its needs. Therefore, it is necessary to co-ordinate the cash budget with other functional budgets. On the other hand, it enables the management to make optimal use of the idle cash by investing in short term financial assets and avoid possible cash shortages.

Preparation of cash budget

Cash budgets can be prepared monthly, weekly or even daily depending upon the company's requirements. One needs to consider about cash receipts expected to be received during the budget period, including borrowings from lenders and cash collected from debtors. All functional budgets must be considered, including sales budget, materials budget, capital expenditure budget etc. Projected cash payments must be deducted from the projected cash available to determine the net cash flow for the budget period. This include payments to creditors, loan repayments and other daily operating expenses. Non-cash expenses such as depreciation and discounts are ignored.

Example 8.7

KILITEX Ltd., a company dealing with textiles is expecting to have a cash balance of TZS 25,000,000 as at 1st April, 2021. The finance manager needs to know the cash position of the organisation for three months and has asked you to prepare a cash budget for three months from April to June, 2021 using the following information:

Month	**Sales (TZS '000')**	**Purchase (TZS '000')**	**Wages (TZS '000')**	**Expenses (TZS '000')**
February	70,000	40,000	8,000	6,000
March	80,000	50,000	8,000	7,000
April	92,000	52,000	9,000	7,000
May	100,000	60,000	10,000	8,000
June	120,000	55,000	12,000	9,000

Additional information:

(a) Credit period allowed by suppliers is two months.

(b) 75% of sales is for credit, and the customers are allowed one month of credit.

(c) Delay in payment of wages and expenses is one month.

(d) Income Tax TZS 25,000,000 is to be paid in June, 2021

Solution:

KILITEX Ltd.

Cash budget for the period of April to June, 2021

Particulars	**April, 2021 TZS '000'**	**May, 2021 TZS '000'**	**June, 2021 TZS '000'**	**Total 2021 TZS '000'**
Cash balance at beginning	25,000	53,000	81,000	25,000
Cash receipts:				
Cash sales	23,000	25,000	30,000	78,000
Debtors	60,000	69,000	75,000	204,000
Total cash receipts	**108,000**	**147,000**	**186,000**	**307,000**
Cash payments:				
Creditors	(40,000)	(50,000)	(52,000)	(142,000)
Wages	(8,000)	(9,000)	(10,000)	(27,000)
Expenses	(7,000)	(7,000)	(8,000)	(22,000)
Income Tax	-	-	(25,000)	(25,000)
Cash balance at the end	**53,000**	**81,000**	**91,000**	**91,000**

Note:

The opening balance at the beginning of April is the same as the beginning balance for the quarter.

Workings:

April, 2021:

Cash sales = 25% of TZS 92,000,000 (cash sales of April collected)
Debtors = 75% of TZS 80,000,000 (March credit sales collected)
Creditors = TZS 40,000,000 (credit purchase relating to February paid)
Wages = TZS 8,000,000 (March wages paid)
Expenses = TZS 7,000,000 (March expense paid)

May, 2021:

Cash Sales = 25% of TZS 100,000,000 (cash sales of May collected)
Debtors = 75% of TZS 92,000,000 (April credit sales collected)
Creditors = TZS 50,000,000 (credit purchase relating to March paid)
Wages = TZS 9,000,000 (April wages paid)
Expense = TZS 7,000,000 (April expense paid)

June, 2021:

Cash Sales = 25% of TZS 120,000,000 (June cash sales collected)
Debtors = 75% of TZS 100,000,000 (May credit sales collected)
Creditors = TZS 52,000,000 (credit purchase relating to April paid)
Wages = TZS 10,000,000 (May Wages paid)
Expense = TZS 8,000,000 (May expense paid)

Exercise 8.4

1. Cash budgets can be prepared monthly, weekly or even daily depending upon the company's requirements.

   Required:

   (a) Explain the term "cash budget"; and

   (b) Explain the objectives of preparing cash budget.

2. The following information relates to DNK Ltd. for the period ending 31st March, 2020

Month	Total Sales TZS '000'	Material TZS '000'	Marketing TZS '000'	Other Expenses TZS '000'
January	25,000	25,000	8,000	7,000
February	27,000	18,000	7,400	6,500
March	29,000	19,000	9,600	4,000

Required:

Prepare a cash budget relating to DNK Ltd. for the period of three months from 1st January to 31st March, 2020.

4. The following information relates to MRQ Ltd. for a period ending June, 2020.

Month	Total Sales TZS '000'	Material TZS '000'	Wages TZS '000'	Expenses TZS '000'
January	20,000	20,000	4,000	3,200
February	22,000	14,000	4,400	3,300
March	24,000	14,000	4,600	3,300
April	26,000	12,000	4,600	3,400
May	28,000	12,000	4,800	3,500
June	30,000	16,000	4,800	3,600

Additional Information:

(a) Cash balance on 1st January, 2020 was TZS 10,000,000.
(b) Sales commission of 5% on total sales is paid within the month following actual sales.
(c) Period of credit allowed by suppliers is two months.
(d) Period of credit allowed to customers is one month.
(e) Cash sales is 50% of total sales for the month.

Required:

Prepare a cash budget for MRQ Ltd. for the period ended March, 2020.

6. From the following data, forecast the cash position at the end of April, May and June, 2019 by preparing a cash budget.

Month	Total Sales TZS '000'	Purchases TZS '000'	Wages TZS '000'	Miscellaneous TZS '000'
February	60,000	42,000	5,000	3,500
March	65,000	50,000	6,000	4,000
April	40,000	52,000	4,000	3,000
May	58,000	53,000	5,000	6,000
June	44,000	40,000	4,000	3,000

Additional information:

(a) 10% of sales is realised in the month of sales and the balance in two subsequent months.
(b) Purchases are paid one month after the month of supply.
(c) 10 % of wages is paid in arrears in following month.
(d) Rent at TZS 500,000 per month is paid quarterly in advance, and it is due in April.
(e) First instalment of income tax is TZS 15,000,000, and it is due on or before 15th June.
(f) Cash in hand on 1st April, 2019 was TZS 3,000,000.

8. DODOMA Oil Ltd. wishes to project the cash position of the organisation for six months, starting January. The following projections are provided:

Month	Total sales TZS '000'	Materials TZS '000'	Wages TZS '000'	Production overheads TZS '000'	Selling overheads TZS '000'
January	10,000	10,000	2,000	1,600	400
February	11,000	7,000	2,200	1,650	450
March	14,000	7,000	2,300	1,700	450
April	18,000	11,000	2,300	1,750	500
May	15,000	10,000	2,000	1,600	450
June	20,000	12,500	2,500	1,800	600

Additional information:

(i) Cash balance on 1st January, was TZS 5,000,000. A new machinery is to be installed at TZS 10,000,000 on credit, to be repaid equally in March and April.

(ii) Sales commission of 5% on total sales is given within a month following sales.

(iii) Period of credit allowed by suppliers is two (2) months.

(iv) Period of credit allowed to customers is one (1) month.

(v) Delay in payment of overheads is one (1) month.

(vi) Delay in payment of wages is one (1) month.

(vii) Cash sales are usually 50% of total sales.

Required: Prepare a cash budget for the first six months from the above estimated revenue and expenses and additional information.

Importance of preparing a cash budget

The following are considered the importance of preparing a cash budget in any organisation:

Monitoring and evaluation of performance: For example if the company has TZS 12,800,000 of outstanding receivables at the end of December as compared to the TZS 9,700,000 that was budgeted, at similar sales volume, then this would indicate that customers are taking longer to pay their dues beyond the agreed terms. This in turn may indicate that the person responsible for debt collection is less efficient than they should be.

Helpful in planning: Cash budget helps planning for the most efficient use of cash. It points out cash surplus or deficiency at selected point of time. This enables the management to arrange for possible solutions to the deficiency before time or to plan for investing surplus money in profitable ventures without threat to liquidity.

Forecasting the future needs: Cash budget forecasts the future needs of funds, its time and the amount well in advance. It, thus, helps planning for raising the required funds through the most relevant sources at reasonable terms and costs.

Maintenance of reasonable cash balance: Cash is the basis of liquidity of the enterprise. Cash budget helps in maintaining the liquidity. It suggests adequate cash balance for expected requirements and a fair margin for the contingencies, not too much and not too little.

Controlling cash expenditure: Cash budget acts as a controlling device. The expenses of various departments in the firm can best be controlled so as not to exceed the budgeted amount, and not spending outside the budgeted activities.

Sound dividend policy: Cash budget also helps the management of companies to properly plan for cash dividend to shareholders, consistent with the liquidity position of the firm. This in turn helps to have a sound consistent dividend policy.

Chapter summary

1. Cost may be defined as the monetary measurement of the amount of resources used or to be used in the production of goods or the provision of services.
2. Cost accounting is referred to a systematic set of procedures for identifying, classifying, allocating, aggregating and reporting costs and cost information relating to the production of goods or provision of services and comparing them with the budgeted or standard costs.
3. A cost object is an item, a component or a division to which costs are referred to.
4. The main objectives of cost accounting are: ascertainment of cost; determination of selling prices; measure the performance; control efficiency; and assist in planning budgetary control and decision making.
5. Costs may be classified according to function (manufacturing, administration, selling and distribution costs); nature (direct and indirect costs); timing of charges against sales value (product and period costs); behaviour (fixed and variable costs); relevance (standard cost, incremental cost, sunk cost, relevant cost and opportunity cost); and responsibility (controllable and uncontrollable costs).
6. Break-even analysis is the study of the interrelationships between costs, volume and profit at various levels of activity.
7. BEP assumptions include: costs either fixed or variable; total costs and total revenue which are linear functions of output; profits which are calculated on a variable costing basis i.e. contribution minus fixed costs; all other variables such as sales price, contribution per unit,

fixed costs remain constant; a single product or constant sales mix.

8. Contribution can be simply defined as the amount remaining to cover fixed cost, after deducting the variable costs from sales.
9. The margin of safety is the difference between the budgeted sales and the break-even amount of sales in volume or revenue.
10. The income statement for a manufacturer is supported by a schedule of cost of goods manufactured which presents all cost that have been used to produce finished goods, such as direct materials, direct labour, and factory overhead.
11. Cash budget helps management to maintain strong liquidity position of the firm.

Revision exercise

1. With examples, differentiate between cost unit and cost object.
2. Write short notes on the following terminologies:
   (a) Opportunity cost
   (b) Sunk cost
   (c) Margin of safety
   (d) Standard cost
   (e) Cash budget
3. Explain similarities and differences between cost and financial accounting.
4. Fill in the following table by putting a tick (✓) in the relevant cells:

	Direct	Indirect	Fixed	Variable	Product	Period	Prime	Manufacturing
Factory rent								
Material								
Labour								
Depreciation								
Interest								
Electricity								
Advertising								

6. OPT Ltd. makes a product called Okay which has a variable cost of sales of TZS 2,000 and a selling price of TZS 1,600 per unit. Budgeted fixed costs are TZS 24,000,000.

   Required:
   (a) Calculate the contribution margin ratio
   (b) Calculate the volume of sales required to break-even using the contribution margin ratio.

7. The following information is given for NZT Ltd.
   - Unit selling price TZS 250,000
   - Variable cost per unit 130,000
   - Fixed costs 24,000,000

   The company targets to sell 250 units.

   Required:

   Calculate breakeven point (in units and amounts) and margin of safety (in units and percentage).

8. The ULUGURU Kids Ltd. has recently started a business of organising kids' game events at different places. The CEO of the company has asked you, the accountant, to provide a detail on how the business is performing. You are provided with the following cost information:

Ticket price/per child (TZS)	100,000
Number of children expected/per week	500
Rent location cost per week (TZS)	5,000,000
Rent equipment cost week (TZS)	7,500,000
Food and drinks cost per child	25,000
Gifts cost per child	5,000
Free t-shirt per child	10,000

   Required: Construct a breakeven chart showing the breakeven point and profit earned.

9. One of the best-selling products of UNGUJA Bags Ltd. is the kid's' school bag known as 'AWALI bag'. The units budget details of AWALI bag for the months from June to October, 2021 are given below:

Details	**TZS**
Selling price	15,000
Direct material	4,500
Direct labour	5,000
Variable selling expenses	2,000

   Additional information:

   (a) Monthly sales of AWALI bag are expected to be:

Month	June	July	August	September	October
Bags	5,000	2,000	2,000	2,000	4,500

(b) Credit sales accounts for 50 per cent of total sales. Debtors are expected to pay in the months following sale for which there will be a cash discount of 2%.

(c) Stock levels are arranged so that the production in one month will meet the next month's sales demand.

(d) Closing stock for May was 5,500 bags.

(e) Production in units is as follows:

Month	June	July	August	September	October
Bags	3,000	2,000	1,500	200	2,000

(g) Suppliers of direct materials are paid in the month following purchase.

(h) Labour costs are paid in the month in which they are incurred.

(i) All other expenses are paid in the month following that in which they are incurred.

(j) Fixed expenses are TZS 12,000 per month and include TZS 1,500 for depreciation.

(k) The bank balance on 1st July, 2021 is TZS 24,000 favourable to the business.

Required:

Prepare a cash budget for UNGUJA Bags Ltd. for three months from 1st July, to 30th September, 2021 in relation to AWALI bag.

11. The following information was extracted from the TEMEKE furniture Ltd. during October, 2020:

Details	**TZS**
Direct materials inventory 1st October, 2020	105,000,000
Direct materials purchased	365,000,000
Direct materials used	385,000,000
Total manufacturing overhead costs	450,000,000
Variable manufacturing overhead costs	265,000,000
Total manufacturing costs incurred during October, 2020	1,610,000,000
Work-in-process inventory 1st October, 2020	230,000,000
Cost of goods manufactured	1,660,000,000
Finished goods inventory on 1st October, 2020	130,000,000
Cost of goods sold	1,770,000,000

Required: Calculate the following costs:

(a) Direct materials inventory 31st October, 2020;
(b) Fixed manufacturing overhead costs for October 2020;
(c) Direct manufacturing labour costs for October 2020;
(d) Work-in-process inventory 31st October, 2020;
(e) Cost of finished goods available for sale in October 2020; and
(f) Finished goods inventory 31st October, 2020;

Chapter Nine

Computerized accounting system

Introduction

Computerised accounting system is an integral part of all types of business. It plays a vital role in the production of reliable information that helps the management to make informed decisions. In this chapter you will learn about computerised accounting system, the evolution of computerised accounting system, the design of computerised accounting systems and the accounting packages that are used by different organisations around the world. The competencies developed in this chapter will enable you to use computerised accounting system to record properly the accounting transaction and be able to prepare various resulting financial reports.

Introduction to computerised accounting system

Computerized accounting refers to the processing of accounting information through the use of computer. This helps to provide users with accurate accounting records and reports to enhance efficiency in decision making. It involves the use of dedicated accounting software and spreadsheet programs to record, classify and summarize accounting information in a well-acceptable manner.

Computerised accounting allows information to be shared almost instantly through the internet or local networks. It takes accounting transactions as inputs that are processed through accounting software to generate reports such as day books, ledgers, trial balance, statement of profit or loss and statement of financial position.

Computerised accounting systems are software programs that are used to process accounting information in the computer. The accounting system are usually processed as per generally accepted accounting principles (GAAP) to produce reports as per user requirements. Computerised accounting systems can be stored on a company's computer at the work place or remotely accessed via the internet. Others are online or web based computerised accounting systems which need not be installed in the computer.

Computerised accounting systems allow users to set up income and expense accounts, such as rental or sales income, salaries, advertising expenses, and material costs. Also, they can be used to manage bank accounts, pay bills, and prepare budgets. Depending with the program, some accounting systems enable users to prepare tax documents, handle payroll, and manage project costing. Most of the computerised accounting system can be customised to meet the requirements of the respective organisation. In this regard, they can assist organisation in creating users of different accounts create accounts in the form of elements of financial statements such as income, expenses, liabilities, equity and assets. Further to this, they can be used to manage bank accounts, pay bills, prepare budgets and process payroll.

Evolution of computerised accounting system

Accounting is as old as money. In the 13th century, Europe moved toward a money economy, thus traders relied on bookkeeping to oversee the multiple simultaneous transactions. As industry moved forward, it was clear that accounting procedures should be refined for higher accuracy and efficiency. During this time, simple machines were used to record business transactions being carried out. However, these simple machines did not have memory like a computer, hence, a person could not go back to an older financial transaction.

As business processes became significantly complicated, it became necessary to develop complex formulas to understand the financial transactions being carried out by a business organisation. In the fifteenth century, Luca Pacioli (1445-1517) an Italian Mathematician who was known as a Farther of Accounting discussed the importance of a formal bookkeeping method which was simple and helped merchants understand business productivity did not help them understand the nuances of accounting. Moreover, it did not give them an idea of where they could reduce expenses and improve accounting management. As a result, different organisations in the society required people with knowledge and skills to record the financial information. In this respect accounting became a profession and countries started to establish institutes to control the profession. This also led to the importance of accounting software to simplify the entire process.

The name of the computer-based accounting application was originally electronic data processing and then changed to data processing and accounting information system. Electronic data processing refers to the use of automated methods to process commercial data. Typically, this uses relatively simple, repetitive activities to process large volumes of similar information such as stock updates applied to an inventory, banking transactions applied to account and customer master files. Electronic data processing processed data which were highly distinguished from human clerical data.

The first commercial business computer was developed in the United Kingdom in 1951. Early commercial systems were installed exclusively by large organisations. Accounting took a giant step toward the future in 1955, when a company known as General Electric bought a computer for the first time purely for accounting. The computer was called UNIVAC (the Universal Automatic Computer) which was mainly used to run payroll in its factories. UNIVAC stored data on magnetic tape and took 40 hours to complete the payroll process.

In 1978, the accounting world saw the birth of Visicalc. It was the first spreadsheet software that enabled financial modelling on the computer. During the same year, Peachtree Software introduced an accounting software package for the early personal computer. As a result, companies could computerise their accounting at a fraction of the cost of purchasing a mainframe. Then, in 1998, Quickbooks was launched which soon dominated the market for day-to-day bookkeeping. This made it easier to put formulas and make changes directly to the QuickBooks' spreadsheets. Presently, it is one of the most popular accounting software, which is used by most companies.

Another shift in the history of accounting occurred in early 2000. The financial world experienced the entry of advanced data capture: optical character recognition and intelligent data capture technology, which enables the automation of the accounts payable process. Instead of manually entering the information, critical bits of data are digitally captured and populated in various index fields. Pre-set templates for commonly structured documents enable information to be automatically entered into the system.

In the 21st century, the world has seen great improvements in the information technology. Such advancements has enabled computerised accounting systems to be developed in a way that they can be accessible from anywhere and anytime. As a result, computerised accounting systems are developed as cloud-based accounting software that produce the same result as stand-alone software. With cloud accounting software, users of accounting systems can access the details of the company's financial transactions anytime. Most importantly, the development of cloud-based accounting software is considered to be very helpful as they enhance security and reduce chances of data loss.

Features of computerised accounting system

A computerised accounting system like other systems has its own characteristics that differentiate it from others. Impliedly, some of these features serve as the strength or benefits of computerised accounting system over manual system These features include:

Simple, accuracy and speed: Computerised accounting system is always user-friendly with features which enable quick processing of information. This involves providing user-definable templates which facilitate accurate data entry of the business transactions.

Integration: A good computerised accounting system is the one that integrate all the business operations, such as sales, finance, purchase, inventory and manufacturing or the systems used by such departments. Other departments of the organisation may draw information from the computerised accounting system and conversely, the accountants may benefit from other software products.

Customisation: A computerised accounting system allows users to customise a number of features and documents such as statements, forms, reports, screens, help systems and other program surfaces to match the organisation's needs.

Security and control: Computerised accounting system have strong security features to allow only authorised personnel to have access to the information recorded in the system. This shall control any kind of hacking or fraud activities by other users.

Scalability: Computerised accounting system can accommodate a change in the size of the business. More importantly, this should be able to accommodate increase in number of users and increase in amount of financial data and transactions.

Advantages of computerised accounting system

Accuracy: Computerised accounting system involves the use of systems which reduce human errors by large and prevent the duplication of data, hence facilitate the production of more reliable and accurate reports compared to manual accounting. Though this depends much on the accuracy of correct data entry. If a wrong data is entered, the system will pick and process it as it is. That is called Gabbage in, Gabbage out (GiGo).

Speed: Computerised accounting system enables the processing of huge volume of transactions within a short period of time. At the same time, the reports are generated automatically while data entry is in progress.

Security: Information processed and stored in the computerised accounting system are well protected against other third parties and can be stored for a long period of time. Users are required to have password in order to access the information.

Cost efficient: Computerised accounting system is considered to be economical and efficient than manual accounting. It requires less number of people to do the work compared to manual accounting. Additionally, computerised accounting system can be offered on monthly subscriptions at lower charges.

Disadvantages of computerised accounting system

The following are the disadvantages of computerised accounting system to an organisation:

High cost of installation: Using computerised accounting requires a company to purchase computers and its accessories which are very expensive, thus small and medium enterprises can hardly afford.

Training and maintenance cost: Companies usually incur costs to train its new employees to be conversant with the computerised accounting system used by the organisation. Also, the company is required to pay for updates when its new version comes into the market and pay for training costs.

Loss of data: The computerised accounting systems require users to create backups on their information more frequently. If backups are not created the company may fail to retrieve the data from the system on the events that the whole computer or saver collapses.

Incorrect information: Using computerised accounting system requires accountant to possess adequate computer accounting skills because, any mistake that will be made by the accountant while establishing account categories or entering data in the system may results to production of inaccurate reports by the system.

Lesser flexible: Computerised accounting systems are usually not very flexible as they may require the user to modify organisation's procedure to be able to effectively use the system.

Components of computerised accounting system

A computerised accounting system consist of five (5) major components: hardware, software, personnel, procedure and data. These are briefly explained as follows:

Hardware: A computerised accounting system is made up of hardware which consists of input devices (such as keyboard, scanner, mouse, touch screen) and output devices (such as monitor and printer) that make a complete computer system.

Software: Any computerised accounting system must include a software as it forms a very fundamental part of a computerised accounting system. Software is a set of electronic instructions that tells the computer how to do certain tasks. There are many software that can be used to process financial information in an organisation. These consist of spreadsheets and other accounting applications known as accounting packages.

Personnel: A computerised accounting systems requires supervision. Personnel such as operators are required to feed financial data into the system and programmers are needed to write codes and programs to implement the working of the system, and provide troubleshooting capabilities when the need arises. Other personnel are system analysts who design the operation and processes of the system.

Procedure: Any computerised accounting system must have series of instructions necessary to perform a specific function in the system and achieve desired output. These instructions are called procedures. In a computer accounting system, procedures may define the working of a hardware component and provide explanation for using the software.

Data: Data represent financial information that are extracted from the accounting source documents and recorded in the computer software. These information relate to the business transactions of an organisations such as purchase of goods, sell of goods, payment of expenses, etc. The data represent information compiled to produce financial statements of the business.

Comparison between Manual and Computerised Accounting System

The following table presents a comparison between manual and computerised accounting system:

BASIS	COMPUTERIZED ACCOUNTING	MANUAL ACCOUNTING
Speed	It is quick and hence less time is consumed to prepare financial statements.	It is slow and time consuming because humans have a limited capacity to accomplish a task
Data storage	Data are stored in the software and can be stored for a long period of time.	Data are stored in papers and files which are kept available for a short period of time.
Data entry	Made by the personnel dedicated in operating the software inputs the data.	The accountant enters manually in the books of accounts.
Skills requirement	In-depth knowledge is required.	Requires basic knowledge for correctly recording financial transactions needed.
Reports production	Reports are generated automatically from the system.	Reports are prepared manually by the accountants.
Backup retrieval	User can create backup and recover information if lost.	Lost data cannot be recovered.

Computerized accounting system in the public sector

The Government of Tanzania uses computerised accounting system to manage its day to day financial activities. In 1994, the government implemented an ambitious reform programme to improve public sector financial management, which initially focused on introducing effective and efficient budget formulation and expenditure management system processes. Following a demand to public fund spending which resulted from mismatching of total expenditure in comparison to the total revenues, the government decided to introduce an Integrated Financial Management System (IFMS) - Epicor System.

Epicor is one of the computerised system software that is a global leader delivering business software solutions to the manufacturing, distribution, retail, and services industries. Historically, Epicor was introduced in Tanzania in 1998 and has been used by the government until 2019/20 financial year. In particular, Epicor managed the government's budgeting management, funds management, financial transactions receipts and payments, printing reports that meet international standards, procurements

and commitments. The Government also employed another system called LAWSON to control and manage activities related to payment of salaries to public servant. The system helped the government in controlling funds at large although users raised complains over its effectiveness.
Epicor system was only used by central and local government. Other public institutions such as pension funds and government agencies employed other computerised accounting systems to manage their finance. In 2019/2020 financial year, the government introduced the Government Payment and Accounting System known as MUSE which stands for "*Mfumo wa Ulipaji Serikalini*". Unlike Epicor system which was used by the government under a licence, MUSE is developed and owned by the government, and is used by central and local government, public institutions and government agencies. On the other hand, the government replaced LAWSON with its own system called Government Salary Payment Platform (GSPP) which is also locally developed.

Apart from MUSE and GSPP, the government developed other computerised system to strengthen domestic revenue collection and ensure discipline in public spending. These include: the Government e-Payment Gateway System (GePG), Electronic Fiscal Device Management System (EFDMS) and Tanzania Customs Integrated System (TANCIS). Others are Government Assets Management Information System (GAMIS), TANePS and Treasury Single Account (TSA).

Exercise 9.1

1. Define computerized accounting system.
2. Describe the features of computerised accounting system.
3. Explain the advantages and disadvantages of computerised accounting system.
4. Briefly explain the evolution of computerized accounting.
5. Compare and contrast between manual and computerised accounting systems.

The design of computerized accounting systems

Successful computerised accounting systems, aggregate organisation financial information and organize it in a manner that allows efficiency in reporting and decision making. Most computerised accounting systems are designed based on the needs and functions of the organisation and are comprised of both computer hardware and software. The key to building effective computerised accounting systems is to understand the organisation accounting procedures and establish a system that enhances the usability of data and streamlines business processes.

Factors to consider in designing and managing computerised accounting systems:

An organisation should consider the following factors when designing and managing computerised accounting system:

Cost: Cost is the first factor to be considered when designing a computerised accounting system. Complex accounting system with a lot of features may be very expensive compared to simple accounting packages used by small businesses.

Compatibility with other management systems used by the organisation: The company must consider the possibility of integrating the computerised accounting system developed with other existing management information systems, if any.

Organisation structure of the company: The development of computerised accounting system should consider the setup of divisions or departments within an organisation. A computerised accounting system used by a company with branches have additional features necessary to control the branches.

Accounting basis: The design of a computerised accounting system must also consider the accounting basis used by an organisation. A computerised accounting system using cash basis is considered to be simple and consume less time to develop compared to the system that uses accrual basis which is more complex and time consuming for the accountant.

Limitations of computerised accounting system

Below are the limitations of computerised accounting systems: -

Training cost: Computerised accounting packages requires users to have special skills in order to operate the system. As a result, a company incurs many costs to ensure that staff are well trained so as to achieve efficient and effective use of computerised accounting systems.

System failure: Computerised accounting system may crash due to hardware or computer operating systems failures. Software damage and failure may be caused by viruses. Thus, it is important to have back-up arrangements in place to eliminate this limitation.

Breaches of security: In computerised accounting system, information can be changed without being noticed. Fraud are usually committed on a computerised accounting system by alteration of data or programmes. Programmers may change users' passwords and change the accounting records.

Health issues: Computerised accounting systems involves the use of computers in processing the financial information. Extensive use of computers may attract health problems to users such as bad backs, eyestrain and muscular pains which adversely affect the efficiency of staff.

Exercise 9.2

1. Describe the limitations of a computerised accounting system.
2. Identify and explain factors that should be considered when designing and managing computerized accounting systems.

Accounting packages

Software is considered to be the fundamental component of a computerised accounting system. Such software are called accounting packaging software or accounting packages. Accounting package can be defined as software that a business uses to record its financial information. Accounting packages offer useful tools like invoicing, bill payment, payroll, and financial reporting. Most of them automatically enter, store and analyse data. This is especially useful for saving time on tasks like bank reconciliation.

Categories of accounting packages

The accounting packages are classified into mainly three categories: ready to use accounting packages; customised accounting packages; and tailored accounting packages. The three classes perform same tasks and produce the same results but each of these categories offers distinctive features.

Ready-to-use accounting packages

These are the accounting software that are developed to meet the requirements of small-sized enterprises like shops, groceries, medical stores and stationaries. They are ready made software that an organisation can buy and immediately start using. Users of ready-to-use accounting packages are limited in number and neither do they require expertise or intensive training to operate the software. Mostly, ready-to-use accounting packages are used by small businesses where the volume of transactions is very low. Usually integration with other software is limited and the software is prone to data frauds as they are less costly.

A good example of ready to use accounting package is Tally. This is an accounting software specifically designed for small sized business units. It is mainly used for recording the daily business data of a firm. Its name is derived from the word “tally’ which means to count and keep the record. Other examples of ready-to-use accounting packages include Pastel, Xero, Freshbooks and Sage One.

Main features of ready-to-use accounting packages

- They are mainly used by small business enterprises;
- The cost of installation is very low;
- The expected level of secrecy for the data is very low;
- Can be easily adapted by any business organisation; and
- Requirement for training before use is very low.

Customised accounting packages

An accounting package is considered to be customised if it is purchased with an option for modification to meet the special requirement and expectations of the user. These software are not developed by the user from the beginning, but purchased from the owners on certain licence agreements. The customisation may relate to addition of the software contents and addition for the specified number of users and their authentication. These software offer more modules or accounting functions more than ready to use accounting packages, as a result the cost of installation and maintenance is relatively high. Most are used by large and medium businesses and can be linked to other management information systems. Customised accounting packages are capable of managing large number of financial transactions and data is more secured in the customised software.

A good example of customised accounting package is Epicor ERP which was used to manage the Government's complex budget, income, and expenditure processes to help facilitate proper financial reporting, ensuring transparency and efficiency in the Government sector. The system is owned by Epicor Software Corporation, a software company based in Austin, Texas. This system played a critical role to minimize overspending, enhance security, accuracy and reliability of government information. It also ensured the implementation of international financial reporting standards and timely production of various financial reports. Other customized accounting packages include ACCPAC, MYOB and QuickBooks.

Main features of customized accounting packages

- Used by large and medium business enterprises;
- Cost of installation and maintenance is relatively higher;
- Expected level of secrecy for the data is relatively higher;
- Number of users and their interface can be increased based on the requirement of the organization;
- Allows linkage of information on the basis of the organisation's requirements; and
- Higher training requirement for its use.

Tailored accounting packages

These are accounting packages that are specifically developed based on user-specific requirements. Accounting software of this nature are usually used in large business organisations and geographically scattered locations, hence they are very expensive. Tailored accounting packages supports multiusers and all key personnel in the financial management systems of the organisation can be featured in. The secrecy and authenticity checks are strong and therefore are not prone to fraud compared to other categories of accounting packages.

Examples of tailored accounting software include MUSE (Mfumo wa Ulipaji Serikalini) which is the Government digital payment system developed by local experts from the Ministry of Finance and Planning in collaboration with other public institutions. The system is specifically developed to be used by the Government Tanzania for all expenditure transactions in a way that it reduces costs, increase efficiency and accountability, and facilitate easy access to financial information. Other examples of tailored accounting packages in Tanzania are GePG and TaNEPS.

Main features of tailored accounting packages

- Used by large and unique business enterprises;
- Cost of installation and maintenance is very high;
- Expected level of secrecy for the data is very high;
- Number of users and their interface is unlimited;
- Allows a wide linkage of information based on the organisation's requirements; and
- Very high training requirement for its use.

Selection of an accounting package

Accounting information is needed for different uses, therefore, different organisations need different types of accounting software. As a result, the market offers many accounting packages in an attempt to cover the need of many organisations. The following factors are usually taken in considerations before selecting an accounting package.

Cost of installation and maintenance: An organisation should consider the costs of acquiring the system, its hardware and maintenance costs. Some accounting packages may appear cheap to buy, but have heavy maintenance and alteration costs, others may initially appear expensive, but require least maintenance, free upgrading and negligible alteration costs.

Flexibility: An organisation should consider the ability of the accounting package to operate on variety of platforms and machines. Some of the accounting packages operate on limited number of operating systems. Therefore, the accounting package should provide a room for users to design various reports as they are used by the organisation before the adoption.

Size of the organisation and transaction volume: The size of the organisation and the volume of business transactions are among the major factors that an organisation should consider before selecting an accounting package. The smaller the size of the organisation, the low the volume of transactions, hence an organisation may choose a simple, single user accounting packages. If the size of an organisation is large may require a sophisticated software to meet the multi-user requirements, geographically scattered and connected through complex networks.

Level of security: Good accounting packages are the ones considered to have strong security features, which prevent unauthorised personnel from accessing or tempering with data already recorded. Where possible, an organisation should select an accounting package which restrict user rights to a specific department. For example, purchase vouchers should be accessed by users in the purchase department and petty cash module should be accessed by the cashier.

Exporting and importing data: A good accounting package is the one that should support the conversion of data from the accounting package to other systems (exporting) or from other systems to the accounting package (importing). The accounting package should allow the hygienic, untouched data transfer between databases.

Chart of accounts

An organisation is required to have a chart of accounts in place before the installation of accounting system. A chart of accounts is a financial organisational tool that provides a complete listing of every account in the general ledger of a company, broken down into subcategories. Chart of account enables users to record financial transactions in right ledger accounts.

Accounts in the chart of accounts are usually categorised on the basis of the elements of financial statements. Therefore, the main account types are income, expenses, assets, liabilities, and equity. All other accounts must be sub-categorised into one of the five elements and be assigned a special number called account code. The process of assigning numbers to accounts in the chart of accounts is called codification. Main accounts are assigned with numbers. Each main type of account is usually assigned a general account number to differentiate from other main accounts, while sub-accounts must be assigned an account code that relates to its main account.

There is no universal chart of accounts that can be used by all organisations around the world. Therefore, number of sub-accounts in a chart of account will be different between entities and so is the responsibility of companies to prepare account codes. Companies in different sectors or industries will have different kinds of charts of accounts. This is mainly due to the differences in nature of activities between the sectors. For example, chart of account of school or college will be different from a chart of account of hospital or a pharmacy.

The following table presents an example of primary chart of accounts and their account codes of a small business:

Account code	**Primary accounts**
101-199	Asset accounts
201-299	Liability accounts
301-399	Equity accounts
401-499	Revenue accounts
501-599	Expense accounts

The following are examples of assets and liabilities sub-accounts in a chart of accounts of a small business as of primary accounts presented above:

Assets	
Account code	**Primary accounts**
101	Cash
102	Petty cash
103	Cash equivalents
104	Short-term investments
106	Accounts receivable
107	Allowance for doubtful accounts
109	Interest receivable
110	Rent receivable

Liabilities	
Account code	**Primary accounts**
201	Accounts payable
202	Insurance payable
203	Interest payable
204	Legal fees payable
207	Office salaries payable
208	Rent payable
209	Salaries payable
210	Wages payable

Exercise 9.3

1. Acertain key consideration while developing effective computerised accounting system
2. Explain any three accounting packages commonly used.
3. Explain the factors that should be considered when selecting an accounting package.
4. Differentiate between three categories of accounting packages.
5. Explain the meaning of chart of accounts

Activity 9.1

1. Scan the nearby government and private organisations and make formal requests to visit their accounting departments. Arrange yourself in groups on not more than ten (10) students, and let each group visit a different organisation. The main purpose of the visit is to practically learn the computerised accounting system used, and its practical procedures. In the process of learning probe information that will enable you respond to the following questions:
   (a) Does the department use computerized accounting system?
   (b) What is the name of the accounting system used, and what are its main features?
   (c) Is the system a ready-for-use, tailored or customised?
   (d) Is the system locally made or purchased? If purchased, what are the terms involved?
   (e) What is the main purpose of having this system in place?
   (f) What is the practical procedures for using this system?
   (g) What information and reports are generated using this system?
   (h) What are the challenges faced while using the adopted system and how does the department cope with them?
   (i) What are the advantages of using the adopted system, compared to other systems?

2. After the visit, each group should prepare a summary of their findings basing on the above questions.
3. Choose one member to make a presentation of your findings in the class and discuss experiences gained from the visited organisations.
4. Summarizes your notice, and file for future reference.

Chapter Summary

1. Computerised accounting refers to the processing of accounting information through the use of a computer. This helps to provide users with accurate accounting records and reports to enhance efficiency in decision making. Computerised accounting systems are software programs that are used to process accounting information in the computer. The main features of computerised accounting system include: simple, accuracy and speed; integration; customization; security and control; and scalability.
2. The key to building effective computerised accounting systems is to understand the organisation accounting procedures and establish a system that enhances the usability of data and streamlines business processes. Factors to consider in designing and managing computerised accounting systems include: cost; compatibility with other management systems used by the organisation; organisation structure of the company; and accounting basis.
3. Accounting package can be defined as software that a business uses to record its financial information. The accounting packages are classified into mainly three categories: ready to use accounting packages; customised accounting packages; and tailored accounting packages. Accounting packages that are used by many organisations include QuickBooks Intuit, Tally Enterprises, Peachtree Complete Accounting, MYOB Software, Sage PASTEL and ACCPAC. Examples of locally developed computerised accounting systems in Tanzania include: MUSE, TaNEPS, GSPP and GePG. These systems are used by the government, public institutions and its agencies.

Revision exercise

1. Define the term “computerized accounting system”, and describe its main features.
2. Differentiate computerised accounting system from accounting package software.
3. List any four advantages of using a computerised accounting system.
4. Discuss the features, advantages and limitations of computerized accounting system.
5. Discuss the advantages and disadvantages of a ready to use accounting software.
6. Provide any three differences between tailored and customized accounting software.
7. Explain any four factors to be considered while sourcing for an accounting software.

Chapter Ten

Auditing

Introduction

In order to ensure reliability of financial reports from the management, it is important the information contained in the reports be subjected to check by another person who is independent of the owners, managers, and preparers of such reports. This independent check or examination is referred to as auditing. In this chapter you will learn about the nature of auditing, types of audit, auditor's working paper, as well as audit programme and procedures. You will also learn about audit sampling, auditing of items in the financial statements and the internal controls system. The competencies developed will enable you to conduct audit of various business units.

Definition and nature of audit

The word audit comes from the Latin word 'Audire' which means 'hearer'. In the past, an auditor was supposed to hear the records of the entity as they were being read by an accountant and then determine their accuracy, hence the name 'hearer'. Currently, the auditor is required to examine the financial information and submit the report regarding the accuracy and validity of the information.

Audit is an examination of records held by an organisation, business, government entity, or an individual. Generally, audit involves the analysis of various financial records and/or other areas. During a financial audit, an organisation's records regarding incomes, expenses, investments, borrowings and other aspects will be examined as part of the audit process.

It is also regarded as a verification activity, such as inspection or examination of a process or system, to ensure compliance to requirements with the view of expressing an opinion thereon. An audit can apply to an entire organisation or might be specific to a function, process, or unit. The main purpose of audits is to ascertain whether the financial information presents a true and fair view of the affairs of the entity. True means the information is factually correct and accurate, and fair means the information is presented in a way that is not misleading/biased.

Objectives of audit

The main objective of the audit is to ascertain whether the financial statements show true and fair view of the financial performance and position of the business. An auditor is engaged to check the accuracy and validity of the information prepared by managers. At the end of audit, the auditor will provide a report that aims at enhancing the confidence of users with regard to the financial information prepared by the managers. The auditor is therefore appointed by owners to reduce the information risk. Information risk is probability that the information presented to the users may be misleading (false or do not accurately present the affairs of the business).

Apart from ensuring the information prepared and presented reflect true and fair view of affairs of the business, other objectives of auditing include:

Detection and prevention of errors: An auditor is responsible for detecting and preventing mistakes that are committed unintentionally because of carelessness, negligence or ignorance. Errors may be of different nature such as error of omission, commission, compensation, principle or clerical errors. These can be detected through checking books of accounts, ledger accounts, vouchers and other relevant records. Although auditor cannot be held responsible for preventing errors, they have a positive role in deterring their occurrence.

Detection and prevention of fraud: Like in errors, auditors cannot be held responsible for preventing fraud, but have a positive role in deterring their occurrence and should arrange their work such that they can detect fraud perpetrated during the year. Fraud is an intentional misrepresentation of the financial statements. Fraud is when misstatements are committed intentionally in order to deceive or mislead users of information. Fraud may include misappropriation of assets and manipulation of accounts.

Finding out whether internal controls are operating effectively: The auditor is responsible for determining whether the policies and procedures laid down by the management are being followed to ensure accuracy of records and assets are being safeguarded and errors and fraud are minimized.

Importance of Audit

Audits both internal and external have the following importance to the organisation, management, owners and employees of the organisation:

(i) It provides satisfaction to the owners of the business about the working of the business operations and the functioning of its various departments.

(ii) It helps in the detection and prevention of errors and frauds.

(iii) Audit establishes a moral check on the staff of the business so that they become cautious of effects of committing any irregularity. This makes the staff more active and responsible.

(iv) Audit protects the interests of

the owners by assuring them that their accounts are being managed properly and their interests will not suffer.

(v) Audit creates confidence among stakeholders such as creditors, debenture holders, and banks.

(vi) Auditing reinforces and strengthens internal control and provides suggestions necessary in improving the internal control system.

(vii) Audited financial statements enable easy access to loans because it provides a crystal-clear image of the business financial performance to the banks and other financial providers.

An auditor

This is an independent person who examines the accuracy of recorded business transactions as per applicable framework. They protect businesses from fraud, point out discrepancies in accounting methods, and, occasionally, work on a consultancy basis in helping organisations to spot ways to boost operational efficiency. Auditors also assess the financial operations and ensure that organisations are run efficiently. They are tasked with tracking cash flow from the beginning to the end, and verifying if organisation's funds are properly accounted for. Once an audit is complete, the auditor's findings are presented in a report that appears as a preface in financial statements. Separate private reports may also be issued to company's management and regulatory authorities as well.

Functions of an Auditor

The International Standard on Auditing (ISA) 200 requires the auditor to undertake the following functions to enable him/her exercise professional performance of the audit and make proper judgement thereof:

(a) Identify and assess risks of material misstatement, whether due to fraud or error, based on an understanding of the entity and its environment.

(b) Obtain sufficient appropriate audit evidence about whether material misstatements exist.

(c) Form an opinion on the financial statements based on conclusions drawn from the audit evidence obtained.

Objectives of the auditor

In conducting an audit of financial statements, usually performed by external auditors, ISA 200 presents the overall objectives of the auditor as:

(a) To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework; and

(b) To report on the financial statements, and communicate as required by the ISAs, in accordance with the auditor's findings.

Types of audits

Audit can be classified according to different bases as explained hereunder:

According to the nature of organisation being audited

Audit of sole proprietorship: The accounts of sole traders are not normally required to be audited however there are situations where they may be audited. Example is when a sole proprietor wants to file tax return or even apply for a loan to support the business. In these cases, the auditor will be appointed by the proprietor and the audit work will depend on the terms of the audit and instructions laid by proprietor, for the owner to obtain the relevant report for the intended purpose.

Audit of partnership: Like sole proprietorship, partnerships are not required to get their accounts audited but most of them prefer to do so because it helps to avoid misunderstandings and doubts among the partners. The scope of audit work will be agreed between the auditor and the partners.

Audit of companies: The audit of the company is compulsory. Every company must appoint an auditor who will be responsible for auditing its books of accounts. The auditor will be appointed at each annual general meeting. Once appointed, the auditor will need to get familiarized with the company before commencement of the audit work. This involves knowing the setup of the company, its product, the industry in which the company operates, the competitors, customers, legal requirements and other relevant details.

Audit of the Government institutions: Governments are also audited to protect the interest of the general public. In Tanzania, Controller and Auditor General (CAG) and the head of the National Audit Office (NAO) is responsible for auditing the government accounts. CAG is responsible to audit the government ministries, departments, agencies and state owned companies. The main purpose of this audit is to ensure that public funds have been spent according to the purpose for which they were collected and disbursed. CAG submits his report to the President of the United Republic of Tanzania, who will then cause them to be tabled before the Parliament.

Audit of other institutions: This involves the audit of institutions like co-operative societies, trusts, charitable institutions, hospitals, hotels, education institutions and clubs. The appointment, scope of work and reporting will depend on the structure of the institutions. For example, a public hospital will fall in the jurisdiction of the CAG, but a private hospital will not. Despite that difference, auditing procedures in both cases will still be the same.

According to the legal requirement

Private audit: This audit is not compulsory. It is not legally required. The audit of sole proprietorship, partnership and management audit of a limited company are examples of private audits. The purpose of these audits is to obtain reports for various use by owners and managers of the entity. In these audits, the client defines the scope of audit and the auditor is required to act accordingly. Example of a private audit is an audit conducted to enable owners file tax returns.

Statutory audit: A statutory audit is a legally required review of the accuracy of financial statements and records of a company or government. The purpose of a statutory audit is to determine whether an organisation provides a fair and accurate representation of its financial position. This type of audit is compulsory. It is legally required by the law. The primary purpose of these audits is to express opinion on the truth and fairness of the information contained in the financial statements. Being subject to a statutory audit is not an inherent sign of wrongdoing. Instead, it is often a formality designed to help prevent misuse of funds.

For example, the government may require that all municipalities submit an annual statutory audit report. This may involve examining all accounts and financial transactions, and finally make the audit results available to the public through the parliament. The purpose is to hold the local government officials accountable for how they handle and spend the taxpayers' money. This will help to ensure any funds disbursed by the government have been used appropriately and according to applicable laws or regulations.

According to the person conducting audit

An audit may be performed by a person as an employee of the organisation, or as an independent auditor. The purpose of auditing, degree of independence, fees charged and users of the audit report also differ between when the exercise remains in the hand of employees and when an outsider is engaged to do the same. Auditing left in the hands of employees is referred to as internal audit and when an outsider is engaged, is referred to as external audit.

Internal audit: Internal audit is an audit on behalf of management to ensure the existing internal controls are efficient and effective and all units of the organisation complies with the policies and procedures as laid down by top management. Internal auditor is employed by the organisation to provide in-house, independent, and objective evaluations of financial and operational efficiency of business activities, including corporate governance. They report back to senior management, the audit findings, including suggestions on how to improve business operations in the future.

External audit: External audit is defined as the audit of the financial records of an entity in which independent auditors perform the task of examining validity of financial records of the company carefully. External audit aims at determining the completeness and accuracy of the accounting records of the client; ensuring that the records of the clients are prepared as per the accounting standards applicable, and to establish whether the financial statements of a client present a true and fair view of the results and the financial position.

Usually, the external auditor is appointed by the owners of the company to conduct audit and produce the audit report in writing basing on various evidences and information gathered during the audit process.

Differences between internal audit and external audit

Internal and external audit can be differentiated on the basis of objectives, on how they are conducted and who conducts them. They can be differentiated as follows:

S/N	Points of differences	Internal audit	External audit
	Objective	To ensure that internal controls system exists and is working effectively.	To give opinion on whether financial reports present true and fair view of the affairs of the organisation.
	Appointment	Internal auditor is employed by management.	External auditor is appointed by shareholders.
	Status	Internal auditor is an employee of the organisation.	External auditor is an independent person.
	Reporting	Internal auditor reports to the management.	External auditor reports to the shareholders/owners.
	Conduct of audit	Internal audit is a continuous audit.	External audit is generally conducted after the year end and after preparation of financial statements.
	Qualification	An internal auditor needs to be a Certified Public Accountant - CPA.	To offer external auditing services, an auditor needs to be a certified public practitioner – (CPA- PP), in addition to being a certified public accountant (CPA). An individual must have completed their audit practical training for a minimum of three years under the supervision of another CPA-PP member.
	Removal	Internal auditor can be removed by the management.	External auditor can be removed by shareholders/owners of the firm.
	Independence	Internal auditors being employees of the organisation are less independent as compared to external auditor.	External auditors are more independent than external auditor.

Similarities of internal audit and external audit

Objective: Have the same objectives of examining the financial information
Reports: they provide reports at the end of audit
Internal control system: They both check the operating effectiveness of internal control system in the organisation.
Professional ethics: They have to abide to the codes of professional conduct such as integrity, objectivity, confidentiality, and professional competence and due care.
Conduct of the audit: They both use similar techniques in conduct of audit.

According to timing of audit

Interim audit: When audit is conducted in the middle of the accounting period, it is referred to as interim audit. The purpose is to determine the accuracy of the reported interim profit or loss, to enable the company to declare interim dividends. This audit is conducted for a particular period between two annual audits.

Final audit: After the end of the accounting period, books are closed and then audited. Audit that is conducted after the end of the accounting period when all accounts have been closed and financial statements prepared is termed as final audit. It is also referred to as periodical or annual audit. In this audit, the auditor will visit the client each year to verify what has been reported on the financial statement.

Continuous audit: This involves a detailed examinations of the accounting records on a regular basis throughout the year. The auditor may visit the client at different intervals say monthly, after every two months or quarterly during the whole year. Large volume of business transactions and weak internal controls may necessitate continuous audit.

According to the approach of conducting audit

Procedural audit: This refers to examination and review of internal procedures and records of the organisation to ascertain whether they are accurate and reliable. The auditor mainly focuses on internal operating procedures and not financial figures. The purpose of procedural audit is to improve the efficiency of internal controls (internal procedures) and ensure all the procedures laid down by the management are implemented.

Management audit: It is the audit which deals with assessment of the effectiveness of management to achieve the objectives of the organisation. It is normally done by an independent person. The main objective is to determine areas of inefficiency in management (management weaknesses) and provide recommendations for improvements.

Standard audit: This audit aims at assessing whether the client's accounting system complies with standards set by professional bodies, such as International Financial Reporting Standards (IFRS) or International Public Sector Accounting Standards (IPSAS's).

Balance sheet audit: This is the verification of the values of assets, liabilities and equity (capital and reserve). In this case, the auditor focuses solely on the balance sheet items and provides a report thereon.

Vouching audit: Here, the auditor checks each and every transaction from the books of original entry to the final accounts. It requires a lot of work. Vouching audit is not commonly used in large organisation where there is a large volume of transactions and good system of internal control.

Auditors' working papers

Documentation is very important in any audit assignment. The auditor has to document the evidence obtained, the procedure performed in gathering such evidence and finally the basis for the conclusion drawn. This process is called audit documentation and it is done on the audit working papers.

Contents of the working papers

Practically each audit working paper should contain the following information:

(i) Name of the client;
(ii) Period covered by the audit;
(iii) The subject matter;
(iv) File reference
(v) The initials (signature) of the member of staff who prepared the working paper, and the date on which it was prepared;
(vi) In the case of audit papers prepared by client staff, the date the working papers were received, and the initials of the audit team member who carried out the audit work; and
(vii) The initials of the member of staff who reviewed the working papers and the date on which the review was carried out.

Types of working papers

Auditors use a variety of steps to achieve objective. These steps tend to vary depending on the organisation, processes or activities being audited. As a result, there can be many types of working papers to suit the needs, but generally they can be classified into the following types:

Interview summaries: These are written notes of relevant information that the auditor gathers from interviewing the client's staff.

Worksheet: This is simply a table with a check mark in to indicate whether a transaction/item has passed through a test. An example of a worksheet to test whether payments made were approved and correctly recorded in the proper account is given below. In the work sheet a tick (✓) means the transaction has passed the test and (×) means it has failed the test.

Audit work sheet template:

Payment No.	Payment transaction	Payment having approval	Payment recorded correctly
	Wages and overtime payments	✓	✓
	Electricity and water bills	✓	✓
	Supply of office equipment	×	✓
	Compensation on land damage	✓	×

Re-performances: These are copies of financial statements that the auditor has used to re-calculate different items that made up the financial statements. Auditors usually show their work on the copy of the financial statements and then save that as a working paper.

In the case of recurring audits, some working paper files may be classified as "permanent" audit files which are updated with new information of continuing importance, as distinct from current audit files which contain information relating primarily to the audit of a single period.

Importance of working papers

The advantages of having working papers to an auditor can be summarized as under:

Facilitates adequate planning: Working papers help the auditor in planning for subsequent year by assisting in deciding the nature, timing and extent of the audit procedures. They save time by avoiding repetition of work and act as training materials to the junior audit staff.

Facilitates supervision and review of the audit work: Working papers serve as a means by which audit team communicate their findings to their senior auditors. Seniors can therefore supervise and maintain control of the audit work already done and yet to be done.

Provide the basis of audit report: Auditors refer to the findings that were recorded in the working papers for preparing the audit report and expressing an opinion on the financial statements of the entity.

Provide defence against negligence charges: An auditor may be charged with negligence in a Court of Law for not detecting a material fraud or error in an entity. This may happen long time after the audit is completed and report submitted. The working papers can support the auditors to defend themselves by proving that they had taken reasonable care while carrying out their audit and drafting their report.

Allows discussion of audit findings with management: Working papers are an effective means by which the auditor can discuss major audit findings with management or audit committee of the client before issuing report.

Audit programmes and procedures

Audit programme

Auditors have to devise steps or procedures to help them conduct audit assignments. These steps help them gather sufficient evidence to form the basis of their opinions. Procedures should be developed in such a way that there is an inter-relationship between one step and another in order to focus on key areas and stop devoting attention to unnecessary matters. Audit programme is like a road map, it guides the auditor on the steps to follow in arriving at the conclusion.

An audit programme helps to ensure that all the necessary work has been done and nothing is left out. The auditor can establish the progress of the work done and consistency can be achieved as the same programme is adopted for succeeding audits. With audit programmes, each staff in the audit team is held accountable for his/her own work, and this in turn reduces supervision of the audit staff.

Disadvantages of audit programmes is that some staff may become less innovative as they are required to follow the procedures as detailed in the programme, leaving no room to make changes or suggestions for improvement. Audit programme may not be able to cover every problem due to changes in various factors such as time and technology. Audit programme restricts flexibility as audit staff stick to the programme only and ignore matters which may not be covered in the programme. Most importantly, the client can commit fraud if they know in advance the contents of audit programme.

Audit procedures

Audit procedures are procedures performed by an auditor in obtaining sufficient and appropriate evidence. These steps enable the auditor to form an opinion on the financial statements, whether they portray a true and fair view of the organisation’s affairs. Auditors employ procedures to gather sufficient and appropriate evidence that will allow them draw conclusion on whether the financial statement present a true and fair view of the affairs of the company.

Auditors design audit procedures to detect all kinds of risks identified and ensure that the required audit evidence is obtained sufficiently and appropriately. Senior auditors usually approve these procedures before the audit team performs their testing. This is to make sure that all concerns or risks are addressed in the procedures. Audit procedures might be different from one client to another; and from one period to another, because internal controls over financial reporting are different from one client to another, and the control might change from time to time. With this respect, auditors are required to update audit procedures from time to time even if the same team had audited the same firm in the past.

Procedures to be followed by both internal and external auditor

There are five (5) basic types of audit procedures followed by auditors (internal and external) to obtain audit evidence. These procedures are analytical review, inquiry, observation, inspection, and recalculation.

Analytical review: These procedures are performed in making analysis of various concepts in order to identify unusual transactions, results or events as the basis for performing other procedures. For example, when the auditors find there is unusual loss indicated in the financial statements, they may apply relevant analysis to verify such loss by comparing the loss for that particular year with profits/losses of the previous years. The analytical procedure can be used for the types of transactions or events that occur regularly or relate with other transactions or events.

Inquiry: Auditors inquire from employees or management on any matter found in the process of auditing. Sometimes auditors may inquire about the functioning or practice of various internal controls. Audit inquiry can be used by the auditor to obtain audit evidence and/or to understand some business or accounting transactions to assist in designing and performing audit tests.

Observation: Under this procedure, auditors gather audit evidence on real time through observing as the procedures are being done. For example, an auditor may join the client team to perform stock taking at the end of the year and observe whether the way they count stocks is in the correct procedures or not. This procedure does not confirm whether all stocks are counted or not, but it confirms the correctness of the procedures involved in counting the stocks. The auditor may also make observation to confirm whether the counting was really done.

Inspection: This refers to verification or vouching of documents. This is one of the most important audit procedures, and 60% of audit work involves the inspection of documents. The auditor might examine whether the invoice issued by the client is really based on the goods received. Also whether the goods received were actually the ones ordered by the company. The auditor might also examine the payment voucher against the authority that approves the payment vouchers.

Recalculation: This procedure is normally done by re-performing the works done by the client to assess if there is any difference between the auditor's work and the client's work. For example, the auditor might re-perform depreciation calculation and assess if there is any difference between auditor's calculation and client's calculation. The auditor might also perform the recalculation on monthly salary expenses prepared by the payroll by finance department to ensure that the net salaries paid to the employee are correct. It is the procedure that is used to confirm the accuracy of transaction that involves calculation.

Verification of items in statements of financial position

It is important that the items in the financial position are free from material misstatements. Assets, liabilities and equity should be free from errors whether intentional or not, as these could distort the decisions of the users of such statement. Auditor should exercise profession scepticism in auditing to ensure that they are not misleading. The procedure to audit item of statement of financial position is discussed as follows:

Audit procedures for trade receivables

To audit receivable balances, the auditor has to find ways of testing the existence, completeness, accuracy, ownership and valuation of such receivables. External confirmation is among the procedures an auditor uses to verify accounts receivables. The auditor requests customers to respond directly to them to confirm what they owe. This confirms the existence of receivable, its accuracy and the right the company has over such balances.

There are two types of confirmation request;

Positive: Request a reply from customers to state whether or not they agree with the balance. This is most suitable where there are weak internal controls

Negative: Request a reply from customers to state if they do not agree with the outstanding balance. This type is appropriate when the internal controls are strong (i.e., errors are not expected).

The audit procedure on receivables include:

(i) Reconcile the sum of balances on the receivable's ledger to the balance on the receivables ledger control account.

(ii) Ensure proper valuation of receivables by looking at the aged debtor listings. The older the debt, the higher the risk of non-payment. Check if a provision is made for debts to ensure the balance of receivable is not overstated.

(iii) Communication with customers should be scrutinised to determine if the debt is payable and to what amount. This is because a customer may dispute an invoice because of quality of the products which makes it difficult to collect the amount outstanding.

(iv) Scrutiny of board minutes to check for any resolution to write off some debts or reduce the outstanding amount so that the only amount receivable remains in the books.

(v) Determine the collection period. Collection period is an indicator of recoverability of debt and efficiency of credit control. Generally, an increase in collection period indicates an increase in chances of defaulting, that is the debt going bad.

(vi) On a test basis, trace items outstanding on customer's accounts to the copies of tax invoice, delivery note and quotations. This provides evidence that the outstanding balance is a genuine receivable.

(vii) On a test basis, test recent orders from customers to the delivery notes and copies of tax invoices and to the receivable ledger to obtain evidence of completeness of balance outstanding.

(viii) Trace amounts paid in customers' accounts to the cash book to verify that they have actually been paid and should not be part of receivables.

(ix) Examine credit notes issued after a year. It is possible for a company to debit a receivable account and credit sales just before the year end, and then reverse this entry early in a new year by issuing a credit note. This is done so as to boost income and profit in the current year which is then quietly reversed in the subsequent year.

Audit procedures for trade payables

In principle many of the procedures that are carried out on accounts payables balance are similar to those that are carried out on accounts receivables balances. However, the auditor will be mainly concerned about the possible understatement of payables balances:

The following are the procedures that an auditor can use to detect a payable that is missing from the financial statements:

(i) Reconcile the sum of balances of individual payables to the balance on the control account. In other words, the total of payables in the statement of financial position must agrees to the detailed amounts of payable to each supplier.

(ii) Examine communication with suppliers and board minutes to identify any disputes or amounts which might not be paid or amounts omitted from payables ledger, but which are been claimed by suppliers or other parties, for example Legal claim.

(iii) Trace from purchase orders to goods received notes (GRN) to tax invoices and credit entries in suppliers' accounts and then trace backward from credit entries in suppliers account to purchases order to ensure completeness, accuracy and existence.

(iv) Determine the payment period. This indicates the number of days of purchases in payables. Generally, an increase in payment period indicates that the company is having difficulty making payments as they become due. By increasing the payables period, the company might begin to lose out on receiving cash discounts. This can become quite an expensive source of finance and needs some explanation.

(v) Re-perform reconciliations of individual payables balances to suppliers' statements. The client has to receive regular monthly statement from suppliers for update of the outstanding amount, if such service is not available then confirm the existence, and accuracy of the outstanding amount auditor may use external confirmation procedures to request the amount due from supplier.

Audit procedures for accruals and prepayments

Prepayments and accruals are likely to be small as compared to receivables and payables, however they can be material and need to be audited. The audit procedures in that case will include:

(i) Compare the amounts with those reported in the previous year. Accrual and prepayments exist because of periodic payments whose trend does not change much from one year to another. For example, if at the end of last year, the entity paid rent for six months in advance, it is probably that in the current year the same trend will continue because rent is payable at particular time of the year.

(ii) Scrutinise payments that are made shortly after or shortly before year end. For accruals auditor simply look for payments made just after year end as this gives indication of an outstanding balance before the year end. Similarly, for prepayments look for payments made that covers a period beyond the reporting period, as this provide evidence of services that will be provided after the year end.

(iii) Analytical procedures. Check if there is a significant change in expenses from one year to another which necessitated the need for accruals.

(iv) Obtain a letter of representation. Letter from the directors to the auditors making certain representations, for example, that all liabilities have been accounted for in the financial statements which includes accruals and prepayments.

Audit procedures for inventory

Inventory is one of the important areas in audit. It directly affects both the statement of financial position as a current asset and reported profit as part of costs of sales. In particular, the auditor has to check the following:

(i) The quantity of the inventory. The auditor must make sure that it is properly described either it is old and therefore not saleable or there is too much inventory so that it will have to be written down to net realisable value.

(ii) The auditor should be satisfied that the inventory is valued in the statement of financial position at the lower of cost and net realisable value of the inventory.

(iii) Ownership of the inventory. Just because an item of inventory is in a store, it doesn't mean that it is owned by the client. It may be third party inventory which is being held there for a fee, or the items may have been sold but have not been delivered yet. The auditor should be satisfied that all the inventory is indeed owned by the client.

Audit procedures for bank and cash

To confirm the company's bank balance the auditor will use mainly two procedures:

Bank confirmation: This is the letter from auditor to the bank requesting the bank to confirm the bank balance. In this letter the bank will confirm the details of the account holder, the bank balance as per the date requested in the letter, details of loan arrangements and any security that the bank holds for loans advanced to the company.

Perform or re-perform the bank reconciliation: In re-performing a bank reconciliation, the auditor will have to agree with the balance as per the bank statement to the bank letter. The auditor will also confirm that the balance as per bank statement totally agrees to the client's cash book, general ledger balance and statement of financial position.

In addition to confirming the bank balance, the auditor will also confirm the cash available in hand at the audit date. To confirm the existence and accuracy of the cash balance the auditor will use cash count. Cash count may routinely be done because of the relatively high risk of theft.

Audit procedures for non-current assets

Procedures to examine non-current assets focus on confirming existence, ownership, completeness, accuracy, valuation, classification and presentation of such assets in the statement of financial position. Such procedures include:

Physical inspection: simple ways to check the existence of the asset is to actually see it. In addition, it allows auditors detect if the assets need to be written down because they are damaged or no longer used.

Check purchase invoices and cash receipts: additions of new non-current assets and disposals of old ones should be checked against invoices, receipts and minutes of the board. This is because additions will be supported by invoices, and disposals will be supported by board resolutions and cash receipts.

Examination of repairs and maintenance: It is important to examine the repairs and maintenance account for items of capital nature which were supposed to be recognised as non-current asset to ensure completeness.

Reconciliation of the carrying amounts: Reconciling the amounts in the general ledger accounts to the non-current asset register.

Re-performance of depreciation calculations: It is important to re-perform a sample detailed calculations of depreciation of individual assets in the asset register to confirm accuracy and proper valuation of non-current assets in the statement of financial position.

Check disposals: This is done to ensure that once an item is disposed, the cost of the item is removed from asset account, accumulated depreciation is removed from accumulated depreciation account, and the profit or loss on disposal is properly calculated.

Inspect documents of title: This confirms ownership of non-current assets.

Verification of items in the statement of profit or loss

The auditor will be interested with occurrence, completeness, accuracy, and cut-off of the items of income and expenses that are recorded in the statement of profit or loss. The understatement or overstatement of any of such item distorts the reported profit and causes the statements to be misleading. As previously stated, auditor has to maintain professional scepticism to ensure this statement is presented fairly in all material respect.

Audit procedures for purchases

To collect sufficient evidence to confirm the figure of purchases that has been incorporated in the statement of profit or loss, the auditor should perform the following procedure;

(i) Trace purchases transactions recorded in the purchases ledger to the purchases orders, tax invoice and delivery notes to verify if such purchases actually occurred.

(ii) Perform purchases analysis to identify unusual events or transactions that might be entered into purchases account to smoothening the profit.

(iii) Check the completeness of purchases amount recorded by matching the purchases figures to the tax purchases orders, quotations, invoices and delivery note.

(iv) Perform cut-off test to see if purchases transactions are recorded in the correct accounting period. Select a sample of supplier's invoices, check the tax invoice date and trace the date to the delivery note and purchases records to ensure the cut-off transaction were correctly recorded.

(v) Compare prepayments that were made to suppliers in the current year to those of the previous year to see if there is any significant differences and assess if they were properly accounted for.

(vi) Make examination: examine subsequent debit notes or invoice cancellation after the year end to identify if such notes or cancellations is required to be adjusted in the current year.

(vii) Perform recalculation in case there is any discount, to confirm that the amount of discount have been calculated accurately and accounted for accordingly. This exercise should be extended to re-calculation of tax if any.

Audit procedures for sales

Auditor will use the following procedures to gather sufficient evidence with regard to sales:

(i) Trace sales transactions: recorded in the sales ledger to the customer orders, tax invoice and delivery notes to verify if such sales transactions occurred.

(ii) Perform sales revenue analysis: to identify unusual events or transactions that might be entered into sales account to smoothening the profit.

(iii) Check the completeness of sales amount: recorded by matching the sales figures to the tax invoices and delivery note.

(iv) Perform cut-off test: to see if sales transactions are recorded in the correct accounting period. The auditor can select a sample of invoices, check the tax invoice date and trace the date with goods delivered note and sales record to ensure the cut-off transactions were properly recorded.

(v) Compare prepayments from customers in the current year with those of the previous year to see if there are any significant differences and assess if they were properly accounted for.

(vi) Examine subsequent credit notes or invoice cancellation after the year end to identify if such notes or cancellations is required to be adjusted in the current year.

(vii) Perform recalculation in case there is any discount, to confirm that the amount of discount have been calculated accurately and accounted for accordingly. This exercise should be extended to re-calculation of tax if any.

Exercise 10.1

1. Describe what is meant by an audit procedure.
2. Explain any four uses and limitations of audit programme
3. Why is it important for audit procedures to be carefully worded?
4. List and explain four items that can be verified when making verification for current assets.

Audit sampling

To form an opinion on the financial statements, auditor needs to examine the documents, transactions and balances that were used to prepare such statements. To examine all such documents, transactions and balances is time consuming, expensive and inconvenient and unless the audit client is very small, auditor tends to rely on sampling.

Audit sampling: Is the application of audit procedures to less than 100% of items within a population of audit relevance. During sampling, all sampling units have a chance of selection in order to provide the auditor with a reasonable basis on which to draw conclusions about the entire population.

Audit sample: Is the number of items included as sample that were used in the course of auditing.

Audit population: Is the entire set of data from which a sample is selected and about which the auditor wishes to draw conclusions.

Sampling therefore occurs when the auditor draws conclusion about the entire set of information by testing a representative sample of items. The items to be selected as sample must not be biased meaning that each item must have an equal chance of being selected as a sample.

For example, if you want to examine purchases invoices, and you have 1,000 purchases invoices then, 1,000 purchases invoices represent population, however, due to time allocated and funds available for the exercise, the auditor may decide to obtain 250 invoices from that 1,000 invoices. Those 250 invoices is what is referred to as sample, and the technique used to obtain such a sample of invoices is called a sampling method or sampling technique.

Methods of audit sampling

Sampling method refers to the techniques used by the auditor in selecting the items for the sample. The sample size can be determined by the application of a statistically-based formula or through the exercise of professional judgment.

Because the purpose of sampling is to provide a reasonable basis for the auditor to draw conclusions about the population from which the sample is selected, it is important that the auditor selects a representative sample, so that bias is avoided, by choosing sample items which have characteristics typical of the population. The principal methods of selecting samples as per ISA530 are the use of random selection, systematic selection and haphazard selection.

Random selection: With random sampling, sample items are selected in a way that each sampling unit has a known probability of being selected.

Systematic selection: In this method, the number of sampling units in the population is divided by the sample size to give a sampling interval, for example 50, and having determined a starting point within the first 50, each 50th sampling unit thereafter is selected. Although the starting point may be determined haphazardly, the sample is more likely to be truly random if it is determined by use of a computerized random number generator or random number tables. When using systematic selection, the auditor should establish that sampling units within the population are not structured in such a way that the sampling interval corresponds with a particular pattern in the population.

Haphazard selection: under this method, the auditor selects the sample without following a structured technique. Although no structured technique is used, the auditor should avoid any conscious bias or predictability and thus attempt to ensure that all items in the population have a chance of selection. For example, an auditor should avoid to always choosing or avoiding the first or last entries on a page, as this may lead to biased results. Haphazard selection is not a statistical sampling method.

Audit report

This is the end product of auditing exercise. Audit report is a clear expression of opinion on the financial statements as a whole. In the report, the auditor expresses whether or not the financial statements as a whole are free from material misstatement and present fairly the affairs of the business as at reporting date. The auditor expresses opinion on the entire set of financial statement and not on individual components of financial statement.

Types of audit report

There are mainly four (4) types of audit reports. These are clean or unqualified report, qualified report, adverse report and disclaimer report.

A clean or unqualified audit report

This report contains an opinion given by the auditor after being satisfied that the financial statements do represent a true and fair view and they are prepared in conformity with the applicable accounting principles and statutory requirements.

A qualified audit report

This is a report issued by the auditor in any of the following two circumstances:

(i) When the auditor having gathered sufficient audit evidence, concludes that there is a misstatement, though material, it is not pervasive; or

(ii) When the auditor is unable to gather sufficient, appropriate audit evidence but concludes that the possible effect of undetected misstatement if any, could be material but not pervasive.

In these cases the auditor will state that, the financial statements show true and fair 'except for…..'

The qualified report is given when:

(a) The financial statements do not represent the true and fair view of the state of affairs and results of the operations, due to lack of conformity with the accounting standards, principles and statutory requirements.

(b) The auditor is not able to verify the value and existence of certain assets.

(c) The information requested by the auditor is not furnished.

(d) Proper books of account are not maintained as required by law.

Adverse or negative report

This report is issued when the auditor having gathered sufficient audit evidence concludes that there is a misstatement in the financial statement, which is material and pervasive. In this case the auditor clearly states that the financial statements do not show true and fair view of the affairs of the organisation. The circumstances to issue this report or opinion are the opposite of those for issuing unqualified opinion. The adverse or negative report will be given on the following grounds:

(i) When the auditor is satisfied that the financial statements do not show true and fair of the affairs of the business.

(ii) The preparation of the financial statements do not conform to the accounting and reporting standards.

(iii) When there are mistakes, discrepancies and material misstatement in the financial statements which are pervasive.

(iv) When there is omission of a material disclosure.

Disclaimer report

This report is issued when the auditor does not have sufficient information on which to base his/her opinion. In the scope and opinion paragraph, the auditor should give disclaimer information. This may happen on the following grounds:

(i) The auditor has not been able to obtain sufficient information to form the opinion.

(ii) The audit examination is not adequate to form an opinion.

(iii) There are some material undetermined item in audit examination.

Contents of audit report

Audit report is made up of the following components:

Title: The title of audit report should help the reader to identify the report. It should disclose the name of the client. The title distinguishes the audit report from other reports.

Addressee: The addressee normally refers to the person who appoints the auditor. If a company appoints the auditor, the addressee should be shareholders. As per law, the complete address of the addressee is required. Addressee for the statutory audit shall be shareholders and in case of special audit, it is central government.

Introductory paragraph: The introductory paragraph should specify that it is the auditor's opinion on financial statements audited by him/her. The period covered by financial statements should be stated with exact dates.

Opinion: The auditor's opinion on the books of account and financial statements examined based on evidence gathered. The auditor has to give his/her opinion:

(i) On whether the financial statements are arithmetically correct and correspond to the figures recorded in the books of accounts.

(ii) In case of unqualified opinion, whether the financial statements represent a true and fair view of the state of affairs and the results of operations.

(iii) In case of qualified opinion, if the financial statements do not present a true and fair view, the reasons for that and where is wrong.

Signature: The signature part should include the signature of the auditor. The personal name and signature of the auditor should be given. If the auditor is a firm, the signature in the personal name and firm name should be given.

Address of the auditor: This should include the location of the auditor or the audit firm, which is ordinarily their city.

Date of the report: The date of completion of the audit work should be mentioned in this section.

Sample of an independent Auditor's report – Unqualified opinion

INDEPENDENT AUDITOR'S REPORT

To the shareholders of ABC Limited

Opinion

We have audited the accompanying financial statements of ABC Limited (the "Company") which comprise the Statement of Financial Position as at 31st December 2021, Statement of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows for the year then ended and summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Company as at 31st December, 2021 and of its financial performance and cash flows for the year then ended in accordance with the Financial Reporting Standards (IFRS) and requirements of the Companies Act 2002 of Tanzania.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the financial statements section of our report. We are independent firm in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), together with other ethical requirements that are relevant to our audit of the financial information. We have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

…………………………………	………………………………	………………………………
[Auditor's signature]	**[Auditor's address]**	**[Date of the auditor's report]**

Example of an independent Auditor's report – Qualified opinion

INDEPENDENT AUDITOR'S REPORT

To the shareholders of ABC Limited

Opinion

We have audited the accompanying financial statements of ABC Limited (the "Company") which comprise the Statement of Financial Position as at 31st December 2021, Statement of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows for the year then ended and summary of significant accounting policies.

In our opinion, the accompanying financial statements do not represent the true and fair view of the state of affairs and results of the Company's operations, as at 31st December, 2021 and of its financial performance and cash flows for the year then ended in accordance with the Financial Reporting Standards (IFRS) and requirements of the Companies Act 2002 of Tanzania.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our **qualified audit opinion** on the standalone financial statements.

Basis for Qualified Opinion

I. The Company's inventories are carried in the statement of financial position at TZS, 132,000,000. The Management has not stated the inventories at the lower of cost and net realisable value but has stated them solely at cost, which constitutes a departure from the International Accounting Standard 2 "Inventories". The Company's records indicate that had the Management stated the inventories at the lower of cost and net realisable value, an amount of TZS 36,800,000 (as at 31st March 2022) would have been required to write the inventories down to their net realisable value. Accordingly, cost of sales would have been increased by TZS 36,800,000. This makes the amounts presented as income tax, profit for the year and shareholders' funds to be incorrect.

II. Included in the receivables amount shown on the statement of financial position is an amount of TZS 48,000,000 due from PINA Company Limited, a company that has ceased operations. The Company has no security for this debt. On the basis that no security has been obtained and no cash has been received during the financial year, in our opinion ABC Company should have made a full provision for doubtful debts at TZS 48,000,000. The provision amount would have reduced profit before tax for the year, and net assets at 31st March, 2022 by that amount.

....	....	....
[Auditor's signature]	**[Auditor's address]**	**[Date of the auditor's report]**

Exercise 10.2

1. Explain why auditor's reports are important to users of financial statement and why is it desirable to have a standard wording.
2. List and explain the important parts of a qualified audit report. How do this parts relate with important parts in the unqualified audit report?
3. Under what circumstances a standard unqualified audit report should be issued?

Internal control system

Internal control system is the whole system of controls, financial and otherwise established by the management to carry on the business of the enterprise in an orderly and efficient manner, safeguard assets and ensure as far as possible the completeness and accuracy of the records. This system includes internal audit, internal check and other controls.

Internal control system works to ensure the assets are safeguarded, financial reports are reliable and performance of the entity is kept within a practical performance range. Individual components of this system are referred to as internal controls. Internal control aims at ensuring efficiency and effectiveness of operations, reliability of financial reporting and compliance with applicable laws and regulations. This can be done by ensuring the management adhere to all policies, and assets are utilized optimally and protected from misuse, frauds and theft. It works to prevent, detect and correct frauds and errors through various techniques.

Objectives of internal control

Internal control should aim to achieve the following objectives:

Efficient conduct of business: there must be controls to ensure that processes flow smoothly and operations are free from disturbances, interruptions and interferences. This mitigates against the risk of inefficiencies and threats to the attainment of intended objectives of the firm.

Safeguarding assets: Internal controls should ensure that assets (both tangible and intangible) are used for the intended purposes, and are not exposed to misuse or theft.

Preventing and detecting fraud and other unlawful acts: controls should be in place to prevent fraud from occurring. However, if fraud and other unlawful acts occur, they should be detected easily and at their early stages. As organisations increase in size and complexity, the nature of fraudulent practices becomes more diverse, and controls must be capable of addressing these.

Completeness, accuracy and timely reporting of financial records: controls should be capable of recording all transactions so that the nature of business transacted is properly reflected in the financial accounts.

Financial statements of a firm cannot be accurate if the information contained are unreliable. Additionally, there should be internal systems that ensure financial reports are prepared and issued in time. The use of accounting packages helps to a large extent on the realization of the accuracy and reliability and easy preparation of financial reports.

Components of internal control

Internal control has five components as explained below:

The control environment: This represents the attitude of the management and employees of the organisation toward internal control. Control environment includes organisation culture and commitment of the management towards: integrity and ethical values; how the assignment and authority are assigned; how the organisation attract; develop and train competent individuals; and how individuals who breach the internal controls are held accountable.

Control activities: These are policies and procedures in place to ensure that management directives are carried out effectively. Examples of control activities include: segregation of duties; authorization and approval of transactions; verifications of transactions and documents; accounts reconciliation and physical controls over assets.

The risk assessment process: This is the process used by management in identifying, assessing and addressing possible risks. Management has to identify the risk, the likelihood of their occurrence, and have mitigating measures in place to deal with the identified risks.

The information system and communication: These consists of technology, hardware and software components, people, procedures and data. Furthermore, it covers how transactions are initiated, recorded, posted and reported in the financial statements.

Monitoring process: This involves monitoring the effectiveness of controls and identifies possible solution in areas of weaknesses. Monitoring helps to ensure high compliance to the established policies and procedures. This reduces the chances of errors, fraud and misstatements in the financial statements.

Types of internal controls

All organisations are subject to threats that may have negative impact to the organisation and result in asset loss. While some of these threats are unintentional, caused by an ignorant employee that leads to costly errors, others are more malevolent, such as the case of fraudulent manipulation and extortion. These risks are present in every business small, medium and large. Regardless of why they happen, internal controls need to be established to avoid or minimize losses caused by these threats. There are three main categories of internal controls that can be used to avoid or minimize the possibility of a loss in an organisation. These are referred to as: preventative, detective and corrective controls. They are further explained in detail hereunder:

Preventative controls: Even in normal life, usually prevention is better than cure. That is to say, it is better if efforts can be made to minimize or even avoid completely the occurrence of a bad event than waiting to deal with the effects after the event has occurred. It is always easier, less stressful and more efficient to establish the appropriate measures to prevent an event from occurring rather than working under the pressure on the effects of the event. Preventative internal controls are those controls put in place to avoid negative events from manifestation.

For example, most banks have installed finger print locks on their internal doors so as to verify identity credentials as a way to restrict unauthorised entrance. Also, some houses now days are installed with electrical fences, place security guards at entrance points or keep dogs with the primary purpose of preventing thieves from entering the houses. Trainings of staffs and backups of computer information in more than one device, installation of anti-virus in computers are also preventative controls.

To put this into real-business context, an organisation may begin by assigning one person to write cheques, and another person to authorize the payments. This break-down, or segregation of duties, is an example of preventative internal controls from an administrative standpoint.

Detective controls: It is very unfortunate that, even if preventive measures are in place, there is a chance that some errors will still occur. That's where detective internal controls come in. When things go wrong, it is important to learn everything about the event, so as to improve the preventative measures in future. From a business and accounting perspective, some common examples of detective internal controls are audits, stocktaking, bank reconciliation, cash counts and analysis of financial statements.

Corrective controls: These are controls that are operational only after the detective internal controls have identified a problem. As previously noted, even when all of the existing preventative controls go as planned, sometimes it is not enough. Upon discovery of an error or defect within the organisation, with detective internal controls, corrective internal controls are implemented to improve the identified shortcomings. These controls may include disciplinary action to an employee who performs poorly, formulation of new or refining policies to prohibit inefficiencies or inappropriate practices such as employee absenteeism.

Chapter summary

1. An audit is an examination of records held by an organisation, business, government entity, or an individual. Audit involves the analysis of various financial records and/or other areas.
2. Internal control system works to ensure that assets are safeguarded, financial reports are reliable and performance of the entity is kept within a practical performance range. It is also done to ensure the management adhere to all policies, and assets are utilized optimally and protected from misuse, fraud and theft.
3. Internal audit works to ensure the existing internal controls are efficient and effective and all units of the organisation comply with the policies and procedures as laid down by top management. Internal auditor is employed by the organisation to provide in-house, independent, and objective evaluations of financial and operational efficiency of business activities, and report back the findings to top management.
4. External audit is the audit performed by independent auditors to examine the validity of financial records of the company and report the same to the owners of the company. External audit aims at determining the completeness and accuracy of the accounting records of the client; ensuring that the records of the clients are prepared as per the accounting standards applicable, and to ensure that the financial statements of the client present a true and fair view of the results and the financial position.
5. Auditors needs to examine documents, transactions and balances that were used in preparing financial statements, to be able to form an opinion on such financial statements. However, examining all such documents, transactions and balances is time consuming, expensive and inconvenient, hence, auditors tend to rely on sampling.
6. Sampling is when the auditor draws conclusion about the entire set of information by testing a representative sample of items. Population is the entire set of data from which the auditor wishes to sample in order to draw conclusion.
7. Audit report is a clear expression of opinion on the financial statements as a whole. In the report, the auditor expresses whether the financial statements as a whole are free from material misstatement and present fairly the affairs of the business as at reporting date.
8. There are mainly four (4) types of audit reports. These are clean or unqualified report, qualified report, adverse report and disclaimer report.

Revision exercise

1. Discuss the objectives of auditing.
2. Write short notes on the following:
   (a) Internal auditing;
   (b) External auditing;
   (c) Management audit.
3. Describe the difference between interim audit, final audit and continuous audit.
4. Who is responsible for auditing the accounts of government?
5. Discuss the components of internal control.
6. Differentiate between the following:
   (a) Voluntary and mandatory controls;
   (b) Financial and non-financial control;
   (c) Manual and computerised controls;
   (d) General and application controls.
7. With examples explain and differentiate detective, preventive and corrective controls.
8. Mention and explain the tests that an auditor can use to test the internal operating efficiency.
9. Before placing reliance on the work of internal auditor what are the factors that external auditor should consider?
10. Write brief notes on the following:
    (a) The purpose of audit working papers
    (b) The difference between permanent audit file and current audit file
    (c) Main contents of a permanent file
    (d) The characteristics of a good working paper
11. State and explain the advantages and disadvantages of audit programme.
12. Techniques of audit testing fall into a number of broad categories. Explain and give examples on each of the following audit technique:
    (a) Inspection;
    (b) Observation;
    (c) Inquiry;
    (d) Confirmation; and
    (e) Analytical review.
13. Differentiate between statistical and non-statistical sampling.

14. Write short notes on the following audit sampling methods:
    (a) Random selection;
    (b) Haphazard selection;
15. List three procedures that auditors can use to gather sufficient evidence from:
    (a) Trade receivables;
    (b) Trade payables;
    (c) Non-current assets; and
    (d) Inventory.
16. Explain the circumstances under which the auditor may issue the following opinion:
    (a) Except for opinion;
    (b) Adverse opinion; and
    (c) Disclaimer of opinion.
17. What is the difference between an auditor and an accountant?
18. Distinguish between a qualified opinion, adverse opinion, and a disclaimer opinion, and explain the circumstances under which each opinion is appropriate.
19. Distinguish between the terms errors and fraud. What is the auditor's responsibility for dealing with each?

Glossary

Accounts payable	the amount of money that is owed by a business to a creditor, usually for goods or services supplied by a creditor. They are treated as current liabilities in the statement of financial position.
Accounts receivable	the amount of money that it is owed by other individuals/firms for goods or services supplied to them. They are treated as current assets in the statement of financial position.
Allot	giving shares/share certificates to the qualifying applicants after fulfilling the prescribed conditions.
Amalgamation	combine or merge two or more businesses/organisations to form a single big/new organisation.
Assets	all economic resources things that a company or a person owns.
Capital	a sum of money which is used to start a business, or which is invested to make more money.
Creditors	a person or commercial enterprise to whom money is owed. In the statement of financial position they sometimes feature as accounts payable.
Debentures	a type of financial security offered by companies to the public for a purpose of raising long-term finance for investment purpose. Debentures offer a fixed rate of interest and are usually secured against assets of the issuing company.
Debtors	an organization or person that owes money.
Depreciation	a reduction in value of an asset over time mainly due to wear and tear. It is also referred to decrease in the value of a currency relative to the value of other currencies.
Discount	a reduction in the usual price of something. It leads to selling or buying an item at a price lower than that is set by the seller. Discounts intends to encourage cash/prompt payment (cash discounts) or bulky buying (trade discounts).
Dissolution	an act of officially ending a formal agreement.

Dividends	part of a company's profits that is paid out to the shareholders.
Equity	amount of money that a company's owner has put into it or owns.
Financial statements	written records that convey the business activities and the financial performance of a company. Financial statements comprise of the income statement, statement of financial position, cash flow statement, statement of changes in equity, and notes to financial statements.
Forfeiture of shares	a situation when the allotted shares are cancelled by the issuing company due to non-payment of the subscription amount as requested by the issuing company from the shareholder.
Franchise	an authority that is given by an organization or government to an individual or group, allowing them to sell its goods or services or securities or to take part in an activity on behalf of such organisation or government. A good example of franchise is to act as an agent selling products/services/securities for another company.
Goodwill	an intangible assets that is calculated when a business is sold to another person/company. Goodwill arises as the difference between the amounts paid to acquire such a business and the actual net value of its assets.
Hire purchase	an arrangement for buying where the buyer makes an initial down payment for an item purchased and pays the balance plus interest in regular instalments while having the use of it. It is usually applicable in the buying and selling of expensive consumer goods like machines, vehicles, buildings etc.
Hire vendor	a person who delivers the goods to the hire purchaser with intention to sell the goods under hire purchase agreement.
Hire charge	the amount of money it costs to buy an item under hire purchase agreement.
Income statement	a financial statement that shows the company's financial performance. It usually indicates the company's income, expenses and profit.
Insolvency	a situations where a debtor cannot pay the debts they owe.

Interest	a fee paid by a business to the lender (creditor), as a return on borrowed fund.
Inventory	are the items, goods, merchandise, and materials held by a business for selling in the market to earn a profit.
Journal entries	a record of the business transactions in the accounting books of a business.
Lease	a legal, binding contract outlining the terms under which one party agrees to rent property owned by another party.
Lessee	a person who is paying to lease an asset.
Liabilities	the future sacrifices of economic benefits that the entity is obliged to make to other entities as a result of past transactions or other past events.
Mortgage	an agreement between borrower and a lender that gives the lender the right to take borrower's property if he/she fail to repay the money borrowed plus interest in the agreed period of time.
Par value	the value of a single common share as set by a corporation's charter.
Partnership	a formal arrangement by two or more parties to manage and operate a business together and share profits.
Partnership deed	a written legal document that outlines the terms and conditions among the partners for smooth and successful running of a business under partnership agreement.
Payroll	a list of compensation a business must pay to its employees for a set period on a given date.
Preference shares	are shares of a company's stock with dividends that are paid out to shareholders before common stock dividends are issued.
Premium	an additional cost charged on top of an asset's/security's usual cost/par value.
Prospectus	a defined legal document describing a company's securities that have been put on sale.
Royalty	are legal binding payment made to the owner of an asset or property for the ongoing use of their assets, mainly on copyrighted

	works, mineral resources, franchises, and patent rights.
Scrap value	the worth of a physical asset's individual components when the asset itself is deemed no longer usable.
Share	a unit of ownership interest in a corporation.
Share capital	refer to the amount of money the owners of a company have invested in the business as represented by equity and/or preferred shares.
Short workings	an excess amount by which the minimum rent is more than the actual royalty.
Sinking fund	a fund created specifically to save or set aside money to pay off a debt or a bond.
Statutory companies	a company that is created by a special act of the parliament.
Sub-lease	a lease of all or part of a rented property by a tenant to a third person.
Sum insured	an amount of money paid by the insurance company to the policyholder in the case of occurrence of an unpredictable insured event.
Super profit	the excess of earned profit over the normal profit.
Taxable income	the amount of income used to calculate the taxes owed by an individual or a company.
Underinsurance	is a when the amount insured is not enough to cover the cost of repairing, replacing or rebuilding the items listed in the insurance policy. The underinsurance leaves the policyholder responsible to meet the shortfall.
Work-in-progress	the cost of unfinished goods in the manufacturing process at a certain period. The work-in-progress cost usually may include the costs for labour, raw materials, and overhead.

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Student's Book

Form Six

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