

ACCOUNTING & FINANCE

YEAR 12 ATAR COURSE – UNITS 3 & 4

THIRD EDITION



**Kathy Kania &
Elizabeth Criddle**



WACE STUDY GUIDE

ACCOUNTING & FINANCE

YEAR 12 ATAR COURSE

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TO THE STUDENT

This study guide covers the Accounting and Finance ATAR Units 3 and 4. The purpose of this guide is to assist students in their preparation for tests and examinations in the new ATAR Accounting & Finance course. The guide has deliberately been kept short so that students use it and view it as a manageable revision tool and not just one kept to the side. The structure of the topics will allow students to use the book throughout the year.

Each chapter starts with a checklist taken from the Western Australia School Curriculum and Standards Authority ATAR syllabus. The chapter then goes on to provide a brief summary of the required content for students to revise. Questions covering the content are provided at the end of each chapter. Answers to these questions are provided at the end of the book.

Trial Tests covering the content for both Unit 3 and Unit 4 have also been provided at the end of the book along with full solutions.

Students are advised to practise the Trial Tests and the Chapter Review Questions many times over throughout the course of the year. We hope that this study guide will help students to better understand the concepts they will encounter and to achieve greater success in the subject.

Kathy Kania and Elizabeth Criddle

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ACCOUNTING & FINANCE

UNIT 3





SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

- distinguish between management accounting and financial accounting
- the role and function of the accountant in managing business operations
- internal audit and control, including:
 - purpose of internal audit
 - review of business procedures and policies
 - detection and correction of errors and deficiencies
- differences between internal and external reporting, including:
 - users: internal and external
 - regulation: accounting standards
 - types of financial statements
 - types of reports
- role of financial institutions and the management of business finance
 - short-term: cash management trusts, money market and term deposits
 - long-term: shares, debentures, unsecured notes, trusts and term deposits
 - the management of business finance with short term and long term perspectives
- the important financial principles of asset management:
 - appropriate levels of investment in non-current assets
 - appropriate management of accounts receivable, inventory and cash
 - appropriate management of short and long term debt
 - appropriate level of equity capital

- the concept of insolvency as defined by the *Corporations Act 2001*:
 - alternative actions for insolvent companies, including:
 - voluntary administration
 - liquidation
 - receivership
- order of priority of the distribution of funds when insolvent
- identification of the costs and potential income associated with engaging in socially and environmentally responsible practices
- the ethical issues encountered in financial dealings between business owners/managers and their employees, clients and investors.

1.1 DISTINGUISH BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

Management Accounting is concerned with providing information to people within the business such as business managers. For Unit 3 Management Accounting focuses on using CVP analysis and Cost Accounting along with Budgeting and Capital Investment analysis to produce information to help the internal management make decisions.

Financial Accounting is concerned with the preparation of reports to be used by people outside of the business, such as the Statement of Comprehensive Income, the Statement of Changes in Equity, the Balance Sheet and the Cash Flow Statement.

1.2 THE ROLE AND FUNCTION OF THE ACCOUNTANT IN MANAGING BUSINESS OPERATIONS

- Employment of a qualified accountant is critical to a business. The accountant will work in the best interests of his/her client.
- The accountant will provide information and advice that will ensure legal requirements of the business are being met.
- Advice will be provided to optimise the owner's chances of reducing taxation debt and optimising opportunities for growth and development.
- The accountants advice will be unbiased as his/her reputation and subsequent client base, is dependent on the success of his/her clients.
- The essential role of an accountant working for a business is to provide the managers of the business with the information they need to maximise their financial performance.

1.3 INTERNAL CONTROL

Internal control involves ongoing procedures that are put into place to ensure the assets of the business are safeguarded and used as efficiently as possible.

Purpose of Internal Control

- To ensure assets, both current and non-current, are protected against loss or damage.
- For the effective utilisation of assets.
- Provision of information to managers to enable them to use the asset effectively

1.4 INTERNAL AUDIT

An Internal Audit is the checking of the operating systems and procedures of a business to ensure that they are working properly and efficiently. This process is done within the business. It is different to external auditing, which is the mandatory checking of the accuracy of the external accounting reports of a business by an independent auditor. However, some businesses will also hire an external auditor to assess whether the Internal Audit has been done properly. Internal Audits review anything which may be important to the business becoming more successful.

Review of Procedures and Policies & Detection of Errors and Deficiencies

- The Internal Audit will examine all the procedures and policies the business has in place. It will look at whether all departments are following these procedures and policies.
- If it is discovered that the policies or procedures are not being followed it will look at the reason for this.
- If it is an oversight of the department then steps will be taken to ensure all employees are aware of what they should be doing and make sure that the policies and procedures put in place are followed.
- If it is discovered that the policies or procedures are not being followed because they are not efficient then the Audit Committee will make suggestions as to what should be put in place.



1.5 INTERNAL & EXTERNAL REPORTING

Internal Reporting is done for use within the business. Users of Internal Reports will be:

- Management
- Employees
- Owners

Types of reports produced internally for Unit 3 are budgets and variance reports.

External Users will be:

- Investors
- Creditors
- Customers
- The Australian Tax Office
- Regulatory Authorities such as ASIC.

External Reporting is mandatory for Public Companies. They are required to produce the following statements for use by external users:

- Statement of Comprehensive Income
- Statement of Changes in Equity
- Balance Sheet
- Statement of Cash Flows.

Reporting Entity Requirements

| INTERNAL REPORTING | EXTERNAL REPORTING |
|---|--|
| No specific reports required | Must use required formats for reports |
| Audits not required | Audits required |
| Done when required by management | Reporting dates set by external bodies |
| No requirement to follow Accounting Standards | Accounting Standards must be followed |

1.6 ACCOUNTING STANDARDS

The Australian Accounting Standards Board (AASB) has issued a set of accounting rules that public companies listed on the Australian stock exchange and some other organisations must follow when they prepare accounting reports for external users.

1.7 MANAGEMENT OF BUSINESS FINANCE

Short-term finance (One year or less)

1. Cash management trusts – a pool of money contributed by the business which is placed in low risk investments (government guaranteed securities or promissory notes issued by major public companies).
2. Money market – where banks and other financial institutions buy and sell debt instruments (promissory notes, bank bills & commercial bills).
 - Bank bill – short term bank loan.
 - Commercial bill – non bank loan.
3. Term deposits – these can be short or long term, depending on the time to maturity.

Long-term finance (More than one year)

1. Shares – company can issue shares. Shares are the units of ownership of a company.
2. Debentures – public companies can issue debentures to the general public. This is a way for the company to raise money. They are loaned the money and have to pay interest on the money as well as paying back the original amount. A debenture therefore is classified as a liability in the same way as a bank loan. Some debentures can revert to shares, others are paid back.
3. Unsecured notes – loans that are not backed up.
4. Trusts and term deposits – a trust is money or other property administered by a person known as a trustee for the benefit of others. A term deposit is money borrowed from a bank for a specific length of time or deposited in a bank for a specified time period.

The management of business finance with short term and long term perspectives.

The biggest difference between managing short term and long term finance is the amount of time. Short term refers to less than a year whereas long term is anything more than one year. Current assets are usually financed with short term funds and non-current assets with long term funding. For example, any shortfall in cash budgeting would use short term finance whereas large capital budgeting decisions involve long term finance.

1.8 PRINCIPLES OF ASSET MANAGEMENT

1. Appropriate levels of investment in non-current assets

- Must not be excessive.
- Assets must be safeguarded from loss, theft or damage.
- They are monitored and controlled.
- Assets must be used as efficiently as possible.
- Management must be provided with the necessary information to ensure protection and efficient utilisation of assets.

2. Appropriate management of cash

- Cash is a vulnerable asset as it is desirable to all and easily disposed of.
- Handling of cash separated from recording of cash – so employee doesn't steal money and make false entries in accounting records to cover theft.
- Cash receipts should be banked daily – little money left on premises.
- Payments approved by a senior employee and made by cheque or by direct bank account transfer – help ensure all payments properly authorised.

3. Appropriate management of accounts receivable

A business should have a set of rules in place to try and ensure that only good customers are sold products on credit and that money owing from debtors is collected in an efficient and timely manner.

- Conduct credit checks – check customer credit.
- Impose credit limits – if selling products to a new customer.
- Send monthly statement to debtors – so customer is aware of the amount currently owed.
- Follow up overdue accounts – as soon as they exceed the payment date.
- Ensure that an appropriate separation of duties exist – recording of debtor transactions separated from handling of cash.

4. Appropriate management of inventory

- Must not have an excessive amount of stock and stock must be safeguarded against loss or damage.
- Handling of inventory should be separated from the recording of the inventory transactions – i.e. an employee may steal, then falsify entries on records.
- Inventory should be stored in secure location – reduce risk of stealing and loss or damage.
- Inventory records should be maintained using the perpetual inventory system – it provides more accurate information and identifies slow and fast moving lines of stock.

5. Appropriate management of short- and long-term debt

- Short term debt is paid within 12 months.
- Inability to repay loans means the business will be insolvent.
- Vital that Financial Planning shows how debt will be paid.
- Cash budgets and cash flow statements monthly allow management to be aware of ability to repay loans and detect trends before any inability to pay back debt.
- Long term debt is financed over more than a one year period (i.e. 10-20 years), e.g. mortgage, debentures.
- Should never owe more than the business owns. Gearing is the percentage of funding that is borrowed against the total assets of a business. The lower the better.

6. Appropriate level of equity capital

Methods of financing a business:

- equity financing – money earned by selling shares in the company.
- debt financing – borrowing or money provided for a limited term by an external provider.

The relationship between the two forms of financing – *gearing or leverage*

- If low geared there is a high proportion of equity.
- If highly geared there is a high proportion of borrowings.

Undercapitalisation – is an inadequacy of equity, caused by underestimating the initial capital needed to start the business or excessively rapid expansion.

Overcapitalisation – is having too much equity.

The business must not be too highly geared or too lowly geared.

1.9 TYPES OF EQUITY FINANCING

Equity Capital: money borrowed by financiers to finance the business.

Equity Financing: raising funds through issuing new shares to existing and/or new shareholders.

Debt-Equity ratio: the higher it is the higher the risk. If it is too high then creditors may take control of the business if it is unable to repay its debt. If Equity Capital is too high then it will make it difficult for the business to secure debt financing through financial institutions.



1.10 INSOLVENCY

Insolvency as defined by the *Corporations Act 2001*. A Company is insolvent if it cannot pay its debts.

Alternative actions for insolvent companies:

- **Voluntary administration:** For company in, or leading to being insolvent or a secured creditor who has not been paid. Will assess the health of the company, report to the creditors and recommend if the company should liquidated or returned to the control of the directors
- **Receivership:** Appointed by a secured creditor who has not been paid on time. Receiver will sell the secured assets of the company to repay the creditor. The money owing is repaid
- **Liquidation:** Occurs when an external person is appointed to:
 1. Collect and sell the assets of an insolvent company.
 2. Distribute the money to creditors.
 3. Investigate the conduct of the directors and other company office holders.
 4. Close the company.

Bankruptcy

This is when a business cannot pay their debts when they fall due. When the business becomes bankrupt its assets get sold to pay creditors. A secured creditor has the right to sell the debtors assets. A person who is struggling to repay debts has a number of options under the bankruptcy act. These options are:

1. **A declaration of intention to present a debtor's petition:**
 - Hand petition to insolvency and trustee service Australia.
 - After submitted the creditor cannot take action to recover money owing for 21 days.
 - Aim: to avoid bankruptcy.
2. **A debt agreement and time to come into an agreement:** Contract between an individual and their creditors. Accepted by majority of creditors. The unsecured debts have to be below a set limit.
3. **A personal insolvency agreement:** Agreement to pay part or all of the amount owing. 75% of creditors in favour of the resolution based on the dollar value of the amount owed. No limit on the size of the debts, assets or after-tax income.
4. **Voluntary bankruptcy:** If unable to repay agreement with creditors can petition for bankruptcy once bankrupt assets are sold.
5. **Involuntary Bankruptcy:** When a creditor applies to a court to have a person made bankrupt. The business assets are sold to pay creditors.

Order of priority of the distribution of funds when insolvent

Assets of a company (in liquidation) are often distributed to stakeholders in this order:

1. The liquidators, administrators or receivers fees and costs.
2. The secured creditors.
3. Employee entitlements owing such as wages, superannuation and annual leave.
4. The unsecured creditors.
5. The shareholders.

1.11 CORPORATE SOCIAL RESPONSIBILITY

Identification of the costs and potential income associated with engaging in socially and environmentally responsible practices

Corporate Social Responsibility (CSR) exists when a business builds a concern for the protection of the environment, its employees and the good of society into its activities. The business can develop a CSR programme through things like: recycling (protection of the environment), contributing to a charity (concern for the community), sponsorship of community events, taxation responsibility, employee-friendly work policies.

Advantages of corporate social responsibility

- Community respect and earning a good reputation.
- More enthusiastic and better motivated employees.
- A greater ability to recruit high quality employees.

Cost to a business of acting responsibly:

The cost of a business acting to protect the environment may include:

- Higher operating costs.
- The need to purchase new energy saving or pollution reducing plant and equipment.
- Loss of competitiveness.



1.12 ETHICS

The ethical issues encountered in financial dealings between business owners/managers and their employees, clients and investors.

Ethics – set of principles that help people decide what is right or wrong. Some things can be legally correct, but ethically wrong. A business needs to know where it stands when faced with these sorts of issues.

A business can be faced with a range of ethical dilemmas such as:

- **Exploitation of employees** – work excessive hours of unpaid overtime or be expected to find new job.
- **Exploitation of overseas workers** – operating in third-world country will take advantage of its workers – under paid.
- **Exploitation of investors** – if manager invests money in high-risk ventures.
- **Acceptance of gifts from supplier** – blurs objectivity of the manager – gets attached.
- **Breaches of confidentiality** – manager passes on confidential business information to someone working for a competitor.
- **Exploitation of foreign consumers** – senior managers exploit foreign consumers of their products.
- **Conflicts of interest** – manager chooses between his duty to act in the interest of the company or self-interest.

TEST YOUR KNOWLEDGE

CHAPTER 1: THEORY

1. Define Corporate Social Responsibility (CSR).

2. Define 'ethics' and outline two ethical issues to consider in dealings between a business owner and customers.

3. List four ethical dilemmas that directors, auditors or accountants may face in their role.

4. Outline the costs and benefits of CSR.

5. Discuss the difference between management accounting and financial accounting.

6. List the statements a financial accountant will produce.

7. Who are the external users of accounting information?

8. List the internal users of accounting information.

9. List three ways an accountant can help in managing business operations.

10. Define internal control.

11. Describe three purposes of internal control, using examples.

12. What is the aim of an internal audit?

13. Outline the purpose of Australian Accounting Standards.

14. What is the difference between short term and long-term finance?

15. List four principles of asset management.

16. Explain how a business can ensure accounts receivable are being managed appropriately.

17. Name two ways a business should manage its short term debt.

18. List the order of priority for the distribution of funds once a business is insolvent.

19. Explain three ways a business can manage inventory.

20. Outline two strategies a business might use to manage long term debt.

21. Describe two possible actions that might occur when a company becomes insolvent.

22. Summarise the differences between external and internal reporting for a public company.



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

- the nature and importance of the master budget.
- the components of the master budget:
 - operating
 - capital expenditure
 - financial.
- preparation of cash budgets, including debtors' and creditors' schedules.
- preparation of budgeted income statements.
- preparation of performance reports for cash budgets and budgeted income statement.
- purpose and function of cash budgets:
 - importance of cash to business viability
 - interpretation of cash budgets.
- purpose and function of budgeted income statement.
- interpretation of budgeted income statement.
- difference between cash and accrual performance.
- purpose and function of performance reports.
- interpretation of performance reports for cash budgets and budgeted income statements.

2.1 WHAT IS A BUDGET?

A budget is a summary statement of plans expressed in quantitative terms.

Why budget?

Budgets are prepared to estimate the cost of a planned activity over a period of time. It is needed by management to assist in future planning, coordinating and controlling all activities within a firm or business organisation.

What are the benefits to management?

Budgeting can assist management to set targets for future activities of a business and to follow up those activities to ensure that the targets that have been set are achieved.

Types of budgets

- **Master budget** – This is a summary of company's plans that sets specific targets for sales, production, distribution and financing activities. It generally culminates in a cash budget, a budgeted income statement, and a budgeted balance sheet.
- **Operating budget** – This is a detailed forecast of all estimated income and expenses based on forecasted sales revenue during a given period (usually one year). It generally consists of several sub-budgets, the most important one being the sales budget, which is prepared first. Since an operating budget is a short-term budget, capital outlays are excluded because they are long-term costs.
- **Capital expenditure budget** – The capital expenditures budget identifies the amount of cash a company will invest in projects and long-term assets.
- **Financial budget** – Financial budgets are financial plans that are structured to detail forecasts on incomes and expenses on both a long-term and a short-term basis. Budgets of this type normally incorporate aspects of other types of budgeting strategies, including the preparation of a detailed budgeted balance sheet, a section that functions as a cash flow budget and shows the receipt of income and the flow of expenses on an annual, semi-annual, and a monthly basis. It typically covers a period of at least one year, although it is not unusual for some organisations to prepare this kind of budget to cover anywhere from two to five years at a time.

Functions of a budget

Budgets serve the purpose of **business planning and coordination**, with different budgets serving different purposes.

Budgets also serve the purpose of **business control**. The planned results for each section of the business can be compared, with the actual results noted on a performance report and any major differences investigated.

Purpose and function of cash budgets – Cash budget shows the expected cash inflows and outflows for the budget period. It is important that a business knows when and how it will receive its cash. Some businesses are seasonal and may require overdraft facilities during quieter times. Projected cash flows will allow them to talk to their bankers to arrange these facilities.

Importance of cash to business viability – If a business cannot pay its debts as they fall due it may result in it going bankrupt.

Interpretation of cash budgets – When preparing a cash budget the business is only concerned with cash received and cash paid in the period. In a cash budget the major outcome is the change in cash held expressed in cash inflows (receipts) and outflows (payments). If this is positive it is considered good. If there were large or unusual items this may also be explained.

What length of time does a budget cover?

The period covered by a budget should be long enough to show the effect of management policies, but short enough so that estimates can be made with reasonable accuracy.

2.2 WHAT IS LIQUIDITY?

Liquidity is the ability to convert assets to cash, e.g. bank balance is more liquid than A/c Receivable, but liquidity is also the ability of the business to meet its debts as they fall due, e.g. is the business solvent, able to meet future financial commitments?

How is liquidity analysed?

Budgeted data on future cash receipts and cash payments is used to analyse the liquidity of a business.

What is the cash flow approach to liquidity?

PLAN

- Set liquidity objectives.
- Prepare cash budget outlining expected cash flows which will obtain the objectives specified.

CONTROL

- Compare actual cash flows with expected cash flows.
- Revise future cash flow expectations in light of actual performance.

What happens if the business is not liquid enough? (inadequate liquidity)

- Loss of discount offered by suppliers.
- Loss of credit rating.
- Refusal of suppliers to supply goods on credit.
- Insolvency and termination of the business.

What happens if the business is too liquid? (excess liquidity)

- Loss of higher returns in cash equivalents, such as marketable securities or short term deposits.
- Loss of additional return such as investing funds into a profitable asset, i.e. inventory, non-current assets, term deposits.

2.3 WHAT ARE SOME OF THE ADVANTAGES OF PREPARING A CASH BUDGET?

A cash budget forms part of the total budgets. A cash budget tells management:

- whether the firm can meet its financial commitments when they are due, and when extra funds might be needed.
- when to buy non current assets.
- when cash may be idle and should be invested.
- when there might be shortages and excesses of cash for seasonal businesses.
- variances between budgeted receipts and payments and actual receipts and payments so they can be investigated.
- how well business policies and procedures are doing (or not).



What does a cash budget look like?

Harper Enterprises Ltd Cash Budget for the year ended 30 June 2025

| | |
|--------------------------------|--------------------|
| Bank balance at 1/7/24 | XXX |
| Add Estimated Receipts | |
| Cash sales | XX |
| Debtors (A/c Receivables) | XX |
| Loan from bank | XX |
| Total Cash Available | <u>XXX</u> |
| Less Estimated Payments | |
| Creditors (A/c Payable) | XX |
| Wages | XX |
| Drawings | XX |
| Motor Vehicle | XX |
| Office Expenses | XX |
| General expenses | XXX |
| Bank balance at 30/6/25 | <u><u>\$XX</u></u> |

Distinction between income earned and cash received; expense incurred and cash paid

When preparing a cash budget, the business is only concerned with cash received and cash paid in the period (regardless of whether it relates to sales/expenses from a previous period or not). E.g. credit sales and credit purchases may have been made last period, but the cash may not be received or paid until the present period.

To find cash receipts from debtors, the debtors account will need to be reconstructed: given balances, sales, bad debts and discount allowed, find cash receipts:

| A/c Receivable (Debtors) | | | |
|--------------------------|---------------|------------------|---------------|
| Balance b/d | 10 000 | Bad debts | 10 |
| Sales | 20 000 | Bank | ? |
| | | Discount allowed | 300 |
| | | Balance c/d | 5 000 |
| | <u>30 000</u> | | <u>30 000</u> |
| Balance b/d | <u>5 000</u> | | |

To find cash payments from creditors, the creditors account will need to be reconstructed: given balances, purchases, discount received, find cash payments.

| A/c Payable (Creditors) | | | |
|-------------------------|---------------|-------------|---------------|
| Discount Received | 100 | Balance B/d | 10 000 |
| Bank | ? | Purchases | 10 000 |
| Balance c/d | 5 000 | | |
| | <u>20 000</u> | | <u>20 000</u> |

Difference between cash and accrual performance – cash performance does not take into account non-cash flow items such as depreciation or gain or loss on sale of an asset. It also does not take into account any accrued income or accrued expenses, these are only recognised when they are received or paid.

Schedule of Receipts from A/c Receivable

Given actual credit sales for Oct \$24 000, Nov \$20 000; estimated credit sales Dec \$18 000, Jan \$22 000, Feb \$24 000; and given debtors pay as follows: 50% in the first month after sale; 30% in the second month after sale; 20% in the third month after sale.

Schedule of receipts from A/c Receivable

| Month | Total Credit Sales | Jan | Feb | March |
|--------------|--------------------|---------------|---------------|---------------|
| October | 24 000 | 4 800 | | |
| November | 20 000 | 6 000 | 4 000 | |
| December | 18 000 | 9 000 | 5 400 | 3 600 |
| January | 22 000 | | 11 000 | 6 600 |
| February | 24 000 | | | 12 000 |
| TOTAL | 94 000 | 19 800 | 20 400 | 22 200 |

Schedule of Payments from A/c Payable

Given that creditors are paid in the month following purchases; and given estimated credit purchases:

Schedule of Payments from A/c Payable

| Month | Total Credit Sales | Jan | Feb | March |
|--------------|--------------------|--------------|---------------|--------------|
| December | 8 000 | 8 000 | | |
| January | 12 000 | | 12 000 | |
| February | 9 000 | | | 9 000 |
| TOTAL | 29 000 | 8 000 | 12 000 | 9 000 |

2.4 WHAT IS THE PURPOSE OF CASH BUDGET PERFORMANCE REPORTS?

To provide management with feedback about their predictions of future cash movement.

- Identifies favourable and unfavourable variances.
- Aids understanding.
- Highlights areas for investigation and action.
- Assists in decision making and planning.

Note F = favourable (i.e. cash inflow > expected; cash payment < expected)

Note U = unfavourable (cash inflow < expected; cash payment > expected)

Cash Budget Performance Report

| | Budget | Actual | Variance |
|-----------------------------|---------------|----------------|----------------|
| Bank Balance 1/1 | 4 000 | 4 000 | Nil |
| Add Estimated Receipts | | | |
| Cash sales | 60 000 | 65 000 | 5 000 F |
| A/C Receivable | 35 000 | 34 000 | 1 000 U |
| Total Cash Available | 99 000 | 103 000 | 4 000 F |
| Less Estimated Payments | | | |
| Cash purchases | 16 000 | 17 000 | 1 000 U |
| Wages | 15 000 | 15 000 | NIL |
| Total Payments | 31 000 | 32 000 | 1 000 U |
| Bank Balance at 31/1 | 68 000 | 71 000 | 3 000 F |

Interpretation (Questions management need to answer)

- What happened to the bank balance? What was the \$ change?
- Where did the change in cash receipts come from? What was the \$ change? Does the credit collection policy need revising?
- What were the changes in cash payments? What items caused the change?
- Overall what is the cash situation?

2.5 BUDGETED INCOME STATEMENT PERFORMANCE REPORT

This report compares estimated income with the actual income earned and the estimated expenses with the actual expenses incurred.

| | Budget | Actual | Variance |
|-----------------------------|---------------|---------------|----------------|
| Sales | 100 000 | 105 000 | 5 000 F |
| Less COGS | <u>38 000</u> | <u>36 000</u> | 2 000 F |
| GROSS PROFIT | 62 000 | 69 000 | 7 000 F |
| Add Other Income | | | |
| Proceeds from sale of asset | 10 000 | 12 000 | 2 000 F |
| Less Operating Expenses | | | |
| Wages | 15 000 | 15 000 | NIL |
| Advertising | 2 000 | 3 000 | 1 000 U |
| Bad Debts | 500 | 1 000 | 500 U |
| NET PROFIT | 54 500 | 62 000 | 7 500 U |

Interpretation

- Was there an improvement in sales? What was the amount? A negative or positive outcome should be investigated and further developed.
- Was actual profit greater than predicted? What variances need investigating?

Purpose of Performance Reports: is to look at where there are variances and then to investigate the reason for the variances.

2.6 CALCULATING LOSS OR GAIN ON SALE OF ASSET.

- Look at the price paid for the asset if not given you will find this information in the Balance Sheet.
- Look at the carrying amount of the asset that is the amount paid less accumulated depreciation.
- If the asset has been sold this year, work out this year's depreciation figure and subtract that from the carrying amount. This is the current value of the asset; you subtract this figure from how much the asset was sold for to see if a gain or loss was made.

Remember when looking at when the asset was sold to work out how many months depreciation you need to take into account. If the asset was sold at the start of the month or the end of the month, as this will impact how many months you work out the depreciation for.

2.7 CASH BUDGET AND BUDGETED INCOME STATEMENT REMINDERS

Bad debts and depreciation do not go in the Cash budget, as they are non-cash expenses. They will go in the income statement.

Accumulated depreciation DOES NOT go in the cash budget or the income statement it will go in the Balance Sheet.

- Loss on sale of an asset does not go in the cash budget it will go in the income statement.
- Gain on sale of asset does not go in the cash budget it will go in the income statement. However, any income received for the sale of the asset will be recorded in the Cash Budget.
- The loan payment is a liability reducing so does NOT go in the Income Statement as it is not as expense. The loan payment amount will go in the budget if it is a direct cash outflow.
- The interest received amount will go in both the cash budget and also in the income statement as other income.
- Any interest paid will go in the cash budget as a cash payment and in the income statement as an expense.
- Any discount received or allowed does not get recorded directly in the cash budget as it is a non-cash transaction, however it may change what the cash received or cash paid out figure is.
- Discount received goes in the Income Statement as add other income the same happens with Dividends received and/or Commission received.
- Discount given goes in the income statement as an expense the same happens with dividends paid or Commission paid.
- Bank fees, rent, electricity, wages, freight outwards, cartage outwards are all expenses they will go in both the cash budget and the Income statement. HOWEVER, remember they may go in the cash budget and the Income Statement as different figures as the cash amount goes in the budget, but the adjusted figure goes in the Income Statement under Accrual Accounting, e.g. if there are accrued amounts.

2.8 DISTINCTION BETWEEN A CASH BUDGET AND A BUDGETED INCOME STATEMENT

| | Cash Budget | Budgeted Income Statement |
|---|---|--|
| 1 | Begins with bank balance or overdraft at start of period | Does not include bank balances at the start |
| 2 | Records all cash received under a heading of estimated receipts. No balance day adjustments are needed. | Records all adjusted income for the period: Balance day adjustment: <ul style="list-style-type: none"> • Accrued income • Prepaid income |
| 3 | Records all cash payments made under a heading of estimated payments. No balance day adjustments are needed | Records all adjusted expenses for the period: <ul style="list-style-type: none"> • Prepaid expenses • Accrued expenses • Inventory • Depreciation • Bad debts • Doubtful debts |
| 4 | Includes the proceeds from the sale of non current assets | The loss or gain from sale of a non current asset is shown |
| 5 | Includes the cash purchase of non current assets | The purchase of non current assets is not shown (Shown in Balance Sheet) |
| 6 | Ends with the estimated bank balance or overdraft at the end of the period | Matches the income against expenses to estimate net profit for the period |

Cash budget is compiled from actual cash movements; whereas the budgeted income statement is based on the accrual basis of accounting.

The budgeted income statement records revenue earned and expenses incurred, rather than whether payment is received or paid.

Cash receipts will not equal revenue and cash payments will not equal expenses over an accounting period.

Example:

Cash receipts = actual cash received from debtors (A/c Receivable), loans and additional capital from owners which are not revenue items.

Cash payments = payments to creditors (A/c Payable), repayments on loans and drawings which are not expense items for the period.

2.9 WORKING OUT COST OF GOODS SOLD

If you are not given the Cost of Goods Sold figure you need to work it out. You can use the following formula:

COGS = Beginning Inventory + Purchases made during the Reporting Period – Ending Inventory.



Blank writing area with horizontal lines at the bottom.

(b) At the end of October, you are provided with the following information about the firm's actual performance for the 3 month period:

| | \$ |
|-------------------------------------|-----------|
| Sales (cash & credit) | 179 500 |
| Servicing fees | 12 300 |
| Wages | 28 400 |
| Rent expense | 9 000 |
| Depreciation | 9 000 |
| Purchases | 118 000 |
| Cost of sales | 111 000 |
| Sales credit fee | 1 495 |
| Inventories at 31 October are worth | \$136 000 |

Required:

A Budgeted Income Statement Performance Report for the 3 month period ending 31 October 2025.

(c) Comment briefly on the variances in the performance report.

4. Mama's Curtain Shop provides you with the following information.

Balance Sheet as at 31 October 2025

| | \$ | \$ | | \$ |
|------------------------|--------|----------|--------------------------|----------|
| Assets | | | <i>Liabilities</i> | |
| Bank | | 3 000 | Accounts Payable | 6 600 |
| Accounts Receivable | | 9 000 | Accrued wages | 1 200 |
| Inventory | | 12 000 | Bank Loan (due 30/11/25) | 7 000 |
| Prepaid rent | | 1 600 | | |
| Motor Vehicle | 11 000 | | <i>Equity</i> | |
| less Accumulated Deprn | 5 000 | 6 000 | Capital | 16 800 |
| | | \$31 600 | | \$31 600 |
| | | | | |

Additional Information:

Based on past experience, 50% of all sales are credit and are collected 80% in the month following sale and 20% in the second month after sale. Actual and expected sales are: September \$48 000, October \$56 000 and November \$52 000.

- Purchases for November are estimated to be \$30 000, 30% cash and the remaining credit. Creditors are paid in the month following purchase to take advantage of the 2% discount for prompt payment.
- Inventory on 30 November is expected to increase by \$4 000.
- Wages of \$27 000 will be paid in cash. Wages payable on the 30 November will be \$900.
- In addition to a base wage, the owner offers sales staff a 5% commission on the total monthly sales in the month of the sales. Accrued commission at the end of November is anticipated to be \$100.
- The annual rates payment of \$5 400 is expected to be paid on 1 November.
- Rent is payable three months in advance. The last rental payment was made on 1 October.
- The business expects to buy 800 shares in Good Ltd at a price of \$10 per share during November.
- The owner will contribute a further \$2 000 cash capital and intends to withdraw \$1 000 of stock and \$4 000 cash per month.
- On 30 November the motor vehicle will be sold, \$5 000 is expected to be received. Depreciation is provided at 30% pa reducing balance method.
- Other November expenses should total \$1 300, including \$100 loan interest that will not be paid until 1 December.

Required:

- (a) Prepare a cash budget for the month ending 30 November 2025.

**Mama's Curtain Shop Budgeted Income Statement Performance Report
For the month ending 30 November 2025**

| Budget | Budgeted | Actual | Variance |
|--------------------------------|----------|--------|----------|
| Sales | | | |
| less Cost of Sales | | | |
| Gross Profit | | | |
| | | | |
| Add Other Income | | | |
| Discount received | | | |
| Gain on sale of Asset | | | |
| | | | |
| Less Operating Expenses | | | |
| Wages | | | |
| Sales Commission | | | |
| Rates | | | |
| Rent | | | |
| Depreciation | | | |
| Other expenses, inc interest | | | |
| Total Expenses | | | |
| Loss /Profit | | | |

(c) The owner of Mama's Curtain Shop asks you:

i) what three feasible ways could she improve the cash flow and avoid a liquidity crisis?

ii) what explanations can you give for the difference in the budget and actual profit/loss as revealed in the Budgeted Income Statement Performance Report?

5. (a) Explain the difference between cash and accrual accounting.

(b) Define liquidity and explain how it is possible for a business to have high profitability but low liquidity.

6. Harry Brown Entertainers has given you a copy of their Cash Budget for the next three months, together with some additional information.

Harry Brown Entertainers
Cash budget
For the three months October – December 2025

| | October | November | December |
|-------------------|----------------|---------------|---------------|
| Balance (opening) | 4 500 | -32 000 | 23 000 |
| Receipts | | | |
| Sales – Cash | 120 000 | 130 000 | 130 000 |
| Proceeds of loan | | 80 000 | |
| Sale of vehicle | 5 500 | | |
| | 140 000 | 183 000 | 173 000 |
| Purchases | 65 000 | 70 000 | 80 000 |
| Wages | 18 000 | 18 000 | 21 000 |
| Insurance | 18 000 | | |
| Other expenses | 19 000 | 20 000 | 21 000 |
| Drawings | 2 000 | 2 000 | 2 000 |
| Purchase of plant | 50 000 | 50 000 | 50 000 |
| | 172 000 | 160 000 | 174 000 |
| Closing | <u>-32 000</u> | <u>23 000</u> | <u>-1 000</u> |

Notes:

- (i) All purchases will be for cash, and estimated monthly credit sales are \$10 000, \$5 000, \$20 000.
- (ii) The vehicle to be sold will have been written down to \$6 000
- (iii) It is estimated that there will be \$1 050 wages accrued at 31/12/25. There were no accrued wages at 30/9/25.
- (iv) The insurance payment in October is the annual premium.
- (v) Estimated monthly depreciation expense is Vehicles \$500, Plant \$1 200
- (vi) From the beginning of November, interest on the loan will accrue at a rate of \$600 per month, payable quarterly in arrears.
- (vii) Inventories were \$26 000 at 30/9/25 and are expected to rise to \$35 000 by 31/12/25.

Required:

- (a) Prepare a Budgeted Income Statement for Harry Brown Entertainers' for the three month period October-December 2024.

- (b) Harper, the manager of Harry Brown Entertainers', has been told she should produce a 'Performance Report'. Explain to her what a Performance Report is and how it will benefit her.

- (c) As in this example, Income Statement Budgets are commonly produced on a 3-monthly, 6-monthly or yearly basis, while Cash Budgets are often produced on a monthly or even a weekly basis. Why is this? Refer in your answer to the importance of liquidity to Harry Brown Entertainers.

7. Following is some actual and budgeted figures for the Market Deli for the first half of 2018.

| | | | | | | |
|------------------------------|--------|--------|--------|--------|--------|--------|
| Sales (Cash & Credit) | 66 400 | 68 000 | 64 800 | 72 000 | 68 800 | 60 200 |
| Purchases (Cash & Credit) | 22 700 | 34 100 | 28 000 | 31 000 | 30 000 | 32 000 |

Additional Information:

- 25% of all sales are for cash. Credit sales collection pattern is: 50% in the month following sale, 30% in the second month following sale, and the remainder in the third month following sale (2% of **all debtors** which are predicted to be irrecoverable and written off **in this month**). A 2% discount is given to debtors who pay in the first month following sale.
- Purchases are usually bought 10% for cash and the remaining 90% on credit. 60% of creditors are paid in the month after purchase and the remainder in the next month.

Required:

- (a) Prepare the schedule showing the collections from Accounts Receivable for each of the months of April, May and June 2025.

- (b) Prepare the schedule showing the payments to Accounts Payable for each of the months of April, May and June 2025.

8.

**Balance Sheet
of Harper Enterprises
as at 31 March 2025**

| Assets | | Liabilities | |
|--------------------------|------------|-----------------------|------------|
| Accounts Receivable | 84 060 | Bank Overdraft | 3 210 |
| Government Bonds (*) | 12 000 | Accounts Payable | 37 476 |
| Inventory | 48 000 | Loan - Australia Bank | 90 000 |
| Prepaid Insurance | 240 | Owner's Equity | |
| Delivery Van | 96 400 | Capital | 94 124 |
| Accumulated Depreciation | (6 200) | Net Profit | 9 690 |
| Total Assets | \$ 234 500 | Total Equities | \$ 234 500 |

| Account | Actual January | Actual February | Actual March | Budget April | Budget May | Budget June |
|------------------------------|-------------------|--------------------|-----------------|-----------------|---------------|----------------|
| Sales (Cash & Credit) | 66 400 | 68 000 | 64 800 | 72 000 | 68 800 | 60 200 |
| Purchases (Cash & Credit) | 22 700 | 34 100 | 28 000 | 31 000 | 30 000 | 32 000 |
| Wages | 6 000 | 5 200 | 5 100 | 4 900 | 5 600 | 6 200 |
| Other Costs | 21 780 | 22 980 | 23 880 | 22 880 | 21 680 | 23 980 |
| Inventory – Closing | 41 800 | 42 000 | 48 000 | 43 500 | 50 300 | 45 700 |

Additional Information:

1. The business acquired a computer from Computer World on 1 March 2025, by paying a deposit of \$4 500, with future payments of \$2 000 planned for the fifteenth of each of the next two months.
2. The Government Bonds (*) mature on 16 May 2025.
3. Interest expected on the government bonds is \$2 100, however this is not receivable until 40 days after maturity.
4. Past performance indicates that 25% of the sales are for cash and the remaining amount will be on credit.
5. Credit sales collection pattern is: 50% in the month following sale, 30% in the second month following sale, 20% in the third month following sale.
6. Purchases are usually bought 10% for cash and the remaining 90% on credit.
7. The payment to Accounts Payable for credit purchases are spread over a two month period: 60% paid in the month after purchase and the balance in the second month after purchase.
8. Loan from Australia Bank is to be repaid in two equal instalments on 4 June and 4 July 2025.
9. Included in the Other Costs table above is \$780 per month for depreciation on Delivery Van.
10. A 6 month advertising campaign started on 13 May 2025. The cost of the program is \$12 000 per month, and the full amount will be paid on 30 June 2025. This project cost has NOT been included in the Other Costs table above.
11. The annual insurance premium is due on 1 May 2025 and costs \$1 368. This annual amount has NOT been included in the Other Costs table above.
12. Wages and the balance of the Other Costs are paid in the month they occur.

Required:

1. Prepare the schedule showing the collections from Accounts Receivable for each of the months of April, May and June 2025.

**Schedule of Collections from Accounts Receivable
for each of the months of April, May and June 2025**

| Details | April | May | June |
|----------------------|-------|-----|------|
| Accounts Receivable: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Totals | | | |

2. Prepare the schedule showing the payments to Accounts Payable for each of the months of April, May and June 2025.

**Schedule of Payments to Accounts Payable
for each of the months of April, May and June 2025**

| Details | April | May | June |
|-------------------|-------|-----|------|
| Accounts Payable: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Totals | | | |

9. TJK Pty Ltd is limestone business which has a monthly cash budgeting system in place and the General Manager is suggesting that it might be a good idea to prepare a budgeted Income Statement as well. Use the cash budget given below for the next three months and the additional information to answer the following questions:

TJK Pty Ltd
Cash Budget for the 3 months April – June 2025

| | April | May | June |
|---------------------------------|---------|-----------|----------|
| Receipts | | | |
| Accounts receivable | 221 000 | 240 000 | 235 000 |
| Proceeds of sale of truck | | 20 000 | |
| <i>Budgeted cash available</i> | 221 000 | 260 000 | 235 000 |
| Payments | | | |
| Fuel | 15 000 | 19 000 | 17 000 |
| Wages | 55 000 | 75 000 | 65 000 |
| Interest payment | | | 75 000 |
| Loan repayment | | | 100 000 |
| Purchase of truck | | 250 000 | |
| Other cash expenses | 18 000 | 20 000 | 20 000 |
| Owners' drawings | 8 000 | 8 000 | 8 000 |
| <i>Total estimated payments</i> | 96 000 | 372 000 | 285 000 |
| Budgeted surplus/shortfall | 125 000 | (112 000) | (50 000) |
| Opening cash balance | 17 600 | 142 600 | 30 600 |
| Budgeted closing balance | 142 600 | 30 600 | (19 400) |

Additional information:

- All sales are on credit and paid in the following month. Sales for June are estimated to be \$220 000
- The truck to be sold will have a carrying amount (book value) at sale of \$30 000
- The trucks and other assets are depreciated at a rate of \$18 000 per month
- The annual insurance premium of \$84 000 was paid on 1 January 2025
- Interest is paid quarterly in arrears
- All other expenses included in the cash budget are paid in the month to which they relate

- iii. The process of producing reports and providing financial information useful for decision-making purposes used by an enterprise is:
- (a) Accounting entity
 - (b) Accrual accounting
 - (c) Financial accounting
 - (d) Management accounting
- iv. Management use a budgeted income statement to predict:
- (a) Competitor's performance
 - (b) Cash flow performance
 - (c) Accrual performance
 - (d) Stock market performance
- v. Which of the following statements is **NOT** true?
- (a) Business failure is often caused by poor asset management
 - (b) The purchase of non-current assets should be financed by short term debt
 - (c) Over investment in inventory represents an opportunity cost for business
 - (d) A bank overdraft may be used to cover short term cash deficits

12. Describe the importance of a cash budget for management of a business.

13. Outline the importance of a master budget and identify its three components.

14. Moon Corp Ltd is planning its cash budget for the months of May and June 2023. All sales are made on credit, and the company follows a specific collection pattern. In the month of sale, 25% of the sales are collected; 50% are collected in the month following the sale, 20% in the second month following the sale, and 5% in the third month following the sale. The remaining 2% of the sales are considered uncollectible.

The company pays for 70% of its purchases in the month after the purchase, and the remaining 30% in the subsequent month. The fixed selling expenses amount to \$5,000 per month, and there are variable selling expenses equal to 4% of the previous month's sales. The administration expenses are estimated to be \$10,000 per month, including \$4,000 of depreciation expenses. The company incurs \$900 per month in finance expenses.

All expenses, except for purchases, are paid for in the same month they are incurred. In May 2023, the company plans to purchase equipment for \$18,000 in cash. Additionally, a \$7,500 loan payable will be repaid during July 2023, with interest calculated at 6% per annum, paid monthly. On 1 May 2023, the company is expecting a cash balance of \$15,000 credit.

Given the following estimated sales and purchases:

| Month | Sales (\$) | Purchases (\$) |
|----------|------------|----------------|
| February | 60,000 | 14,000 |
| March | 55,000 | 12,500 |
| April | 62,000 | 13,500 |
| May | 70,000 | 9,000 |
| June | 80,000 | 11,500 |

Required:

- (a) Prepare a schedule of collections from debtors for each of the months of May and June 2023.
- (b) Prepare the cash budget for the months of May and June 2023, including the cash balance at the end of each month.

15. Brewster & Co have supplied you with the following information.

At 31st March 2026, the Accounts Receivable Balance is \$60,000, the Accounts Payable Balance is \$50,000.

The Cash at Bank balance at 30 March 2026 was \$45,000.

Predicted information for the months of April, May and June is as follows:

- Sales are all on credit and are collected in the month following sale with a 2% discount offered for prompt payment.
- Sales for April are expected to be 10% more than the accounts receivable balance at the end of March, in April and May, sales are expected to be an equal amount and to be 10% higher than April sales.
- Purchases are all on credit and are paid for in the month following purchase. Expected purchases are April \$49,500, May and June \$54,450.
- Cost of sales for the period April to June is also expected to amount to \$88,400.
- In April it is expected that \$50,000 in capital will be raised from a second shareholder who is investing in the proprietary company.
- Staff wages paid per employee will equal \$4,500 per month. Three staff work for the company. At 30th June, accrued wages of \$3,000 in total are expected as staff work extra hours. This amount will be paid for in July.
- On April 1st, annual insurance of \$9,000 will be paid.
- Factory rent of \$9,840 will be paid on 31 May for April and May. Accrued factory rent at June 30th, 2024 is expected to be \$4,920. No further rent will be incurred or paid until July 1st.
- At the end of June, a motor vehicle with a cost value of \$35,000 will be sold for \$10,000 cash. Its accumulated depreciation at the beginning of April is \$23,000 and it is depreciated at 20% per annum on cost.
- A loan is expected to be taken out June 1st for \$40,000. This loan is to be paid back over 10 years with equal repayments of loan principle being made at the end each month plus interest which is charged at 5% per annum and also paid at the end of each month.
- Equipment purchases at the beginning of May will amount to \$20,000. Depreciation on the Equipment is 20% reducing balance.



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

- nature and importance of capital investment decisions.
- concept of the time value of money.
- factors affecting capital investment decisions, including:
 - consumer preferences
 - competition
 - government regulation.
- capital investment/budgeting techniques for capital expenditure, limited to calculations for cash flows using straight-line depreciation method only and net of taxation.
 - discounted cash flows [net present value (NPV) only].
 - payback period.
- interpretation of capital investment/budgeting techniques to evaluate capital expenditure.
- importance of business planning, including a consideration of:
 - goals, objectives and generic business strategies: cost leadership versus differentiation, strategic initiatives and performance management
 - reducing costs and risks

3.1 NATURE AND IMPORTANCE OF CAPITAL INVESTMENT DECISIONS

Capital investment decisions are long-term business decisions considered high risk because they usually involve large sums of money relative to the business size and usually involve the acquisition of non-current assets. Once a capital investment decision is made it is highly difficult to reverse. These decisions have high importance as if the business makes a bad decision it can severely affect the businesses performance in a negative manner. For these reasons it is vital for businesses to evaluate capital investment decisions and investigate which is the best alternative. There are several ways a business can do this. Unit 3 uses two Capital Budgeting Techniques, the Payback Period method and the Net Present Value method to examine which is the best capital investment decision to make.

Capital Budgeting is a long-term planning tool

3.2 THE PAYBACK PERIOD

Using the Payback Method an estimate is made of how long it will take for the extra cash revenue generated by the investment to recover the cost of the project. This time period can be used to compare alternative investments or measured against some benchmark that the business has decided for evaluating such projects (e.g. projects must be paid back in 3 years or less). If the project meets this criterion it is acceptable, if not it is not.

The information required is the original cost of the project and the net cash flows generated by the project over its first few years of existence i.e. extra income or savings generated minus the extra cash expenses incurred (Cash Inflows minus the Cash Outflows). Using this information the business then calculates how long in years and months it will be before the original cost of the project is recovered.

The net cash flows (NCF) for the Payback period may be different or they may be constant.

Payback Period Constant Net Cash Flows

When the annual net cash flows from an investment are equal each year the following formula is used:

$$\text{Payback Period} = \frac{\text{Initial Cost of the Investment}}{\text{Annual Net Cash Flows}}$$

Example 3.1

The Jelly Bean Shop is looking at a new jelly-bean manufacturing machine. Product A can be purchased for \$100 000 and the business estimates that its annual net cash flows will be \$10 000. Alternatively Product B can be purchased for \$50 000 and should produce net cash flows of \$4 000. The payback periods for the two photocopiers are:

$$\begin{aligned} \text{Product A} &= \$100\,000 / \$10\,000 \\ &= 10 \text{ years} \end{aligned}$$

$$\begin{aligned} \text{Product B} &= \$50\,000 / \$5\,100 = 9.804 \text{ (this must be converted into months and not left as a} \\ &\text{decimal. To do this times } 0.804 \text{ by } 12 \text{ months} = 9.65 \text{ which we round up to make} \\ &\text{10 months)} \\ &= 9 \text{ years and } 10 \text{ months.} \end{aligned}$$

Therefore Product A is the best alternative as it will be paid off 2 months quicker.

Payback Period Uneven Net Cash Flows

When the Net Cash Flows from each period are not even the method above cannot be used. In this case we need to add each period's net cash flows until the sum is equal to the initial cash investment.

Example 3.2

A business wants to invest in equipment which has a cost of \$20 000. They will only accept proposals that have a Payback Period of 5 years or less. The net cash flows forecast for the future are below:

| Year | Annual Net Cash Flows | Cumulative Net Cash Flows |
|------|-----------------------|---------------------------|
| 1 | \$1 000 | \$1 000 |
| 2 | \$2 000 | \$3 000 |
| 3 | \$4 000 | \$7 000 |
| 4 | \$7 000 | \$14 000 |
| 5 | \$10 000 | \$24 000 |

As can be seen above the initial investment is recovered after more than 4 years but less than five years. In Unit 3 we make the assumption that the cash inflows are even each month and therefore we can calculate the years and months in the following manner:

Step 1:

- Find the amount still to be recovered after Year 4
- Initial Investment of \$20 000 – Year 4 Cumulative Net Flow of \$14 000 = \$6 000

Step 2:

- Work out how much the amount to be recovered (\$6 000) is in relation to Year 5's Annual Net Flow figure of \$10 000.
- $6\,000/10\,000 = 0.6$

Step 3:

Express the decimal as months. $0.6 \times 12 \text{ months} = 7 \text{ months}$.

It will take 4 years and 7 months to payback the initial investment. The equipment should be bought as it can be paid back within the desired 5 year time frame.

Cost savings and incremental cash flows

If you come across a situation where the business has a cost saving or incremental cash inflows or outflows you need to reduce all of these figures down to the one annual Net Cash Flow figure.

Example 3.3

Bob Howard is interested in an apple picking machine. The machine costs \$40 000. It will save Bob \$8 000 (cash inflow) per annum on his labour hire but will increase his electricity (cash outflow) by \$1 000 per annum and \$3 000 in servicing fees per annum. Bob will only accept a Payback Period of 9 years or less.

Step 1:

- Work out the annual Net Cash flow by taking the Inflows from the Outflows
- \$8 000 inflows minus \$4 000 outflows = Annual Net Cash Inflow of \$4 000

Step 2:

- Work out the Payback Period
- $\$40\,000/\$4\,000 = 10 \text{ years}$.

The Investment should not go ahead as the Payback Period is 10 years and therefore a year longer than Bob's Target Payback time.

Salvage Value

If there is any salvage value this needs to be deducted from the initial cost.

3.3 CONCEPT OF THE TIME VALUE OF MONEY

This concept recognises that money today does not have the same value in the future due to the impact of factors such as inflation and interest rates, and so a dollar owed today (or owned) is worth more than a dollar in the future.

Advantages of the Payback Period Method

1. The method is simple and objective, as it simply looks at the time taken to pay off the investment.
2. It takes into account liquidity, which may be vital to the survival of the business.

Disadvantages of the Payback Period

1. It does not take into account the Time Value of Money.
2. The method confines itself to cash flows, rather than accrual returns.
3. Ignores the fact that just because an investment can be paid back within the shortest time does not mean it is the best alternative for the business to implement.
4. Cash received after the Payback Period is not considered.

3.4 NET PRESENT VALUE (NPV)

The Net Present Value is the value today of a sum of money, in comparison to what that sum of money may be worth at some specified time in the future if it had been invested at compound interest rates. It takes into account the time value of money.

NPV = Present Value of Future Net Cash Flows – Present Value of Cost of Project

Rule of NPV

The golden rule of the NPV method of Capital Budgeting is accept investments with a zero or a positive NPV and reject investments with a negative NPV.

NPV and Lump Sum and/or Annuity of Differing Values

If the Net Cash Flow is received at the end of the investment period in one lump sum the below method is used to calculate the present value.

$$PV = \frac{NCF}{(1+i)^n}$$

Where PV = present value

NCF = net cash flow

i = interest rate/discount rate/cost of capital

Example 3.4

Tim Babolat is looking at an investment, which will return \$10 500 in 3 years time and the interest rate is 6%. What is the present value of the return?

The NCF is \$10 500, the interest rate is 6% and n is 3.

$$PV = \frac{10\,500}{(1 + 0.06)^3}$$

To find this out look it up in Table 1 Present Value of \$1 received n years from now = 0.8396

$$PV = \frac{10\,500}{0.8396}$$

$$PV = \$8815.8$$

If the investment return is paid annually but in differing amounts then the above method and same table values are used.

Example 3.5

Alexandra Prince is looking at an investment, which will return \$5 000 in Year 1, \$3 000 in Year 2 and \$7 000 in Year 3. The interest rate is 8% (this uses the same table as above).

$$PV = \frac{\$5\,000}{(1+0.08)^1} + \frac{\$3\,000}{(1+0.08)^2} + \frac{\$7\,000}{(1+0.08)^3}$$

$$PV = \frac{\$5\,000}{(0.9259)} + \frac{\$3\,000}{(0.8573)} + \frac{\$7\,000}{(0.7938)}$$

$$PV = \$4629.5 + \$2571.9 + \$5556.6$$

$$PV = \$12\,758$$

NPV and Annuity of same amounts

The only difference between receiving an annuity of the same amount each year as opposed to the above example where the annuity amounts are of a different value is that the second NPV Table is used, **the Present value of an annuity of \$1 received each year for the next n years, table.**

Depreciation and Net Present Value

In Capital Budgeting Cash Flows are on an after-tax basis. This means depreciation has usually been taken into account. Depreciation is not a cash flow but in Accounting it is legally used by companies to lower their taxation amount. Therefore you need to make sure that a depreciation amount has not been included in the expenses figure. If it is included then you will need to subtract the depreciation amount to determine the actual cash outflow.

Advantages of NPV Method

1. It takes into consideration the time value of money.
2. Unlike the Payback Period Method, the NPV method takes into account the cash flows for the entire lifetime of the proposal and not just during its payback period.

Disadvantages of the NPV Method

1. It does not take into account risk.
2. More complicated to work out in comparison to the Payback Method.
3. The method is sensitive to the discount rate used. A small increase or decrease in the chosen discount rate can have a big impact on the final output.

3.5 FACTORS AFFECTING CAPITAL INVESTMENT DECISIONS

1. **Consumer preferences:** it is crucial to consider customers' preferences as they are the main source of income and their demand for the business is influenced by the perception of the business and the more preference it meets, the more likely it will be successful. Some of these are: changing fashion habits and social values, e.g. today it is highly preferable to be environmentally friendly.
2. **Competition:** The competition is an important factor and must be considered because as in any industry a business must keep up with or keep ahead of competitors to keep its operations running and successful. Need to consider if it will put you ahead of or behind the competition and in what way.
3. **Government regulations:** A business must operate within the law and regulations set by the government and thus it must make sure that no laws or government policy will be broken, e.g. cannot invest in machinery that will pollute above the legal allowable limits.

Generic business strategies: cost leadership versus differentiation, strategic initiatives and performance management

- **Cost Leadership:** marketing strategy whereby a business that has a standard product offers that product for sale at low price e.g. low fares to compete with another airline. Companies like Kmart use this strategy.

- **Product differentiation:** Occurs when a business offers customers a product that has unique or superior benefits, it is different to what is currently on offer therefore has a higher price tag. Apple uses this strategy.
- **Strategic Initiatives:** important plans that once implemented will have a significant impact on the entire business
- **Performance Management:** refers to incentives that may be given to managers to reduce the cost of the business that are under the manager's control. e.g. Cash bonus at end of each year.

PRESENT VALUE TABLES

| Table 1: Present value of \$1 received (or paid) n years from now | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| n | 6% | 7% | 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% | 20% |
| 1 | 0.9434 | 0.9346 | 0.9259 | 0.9174 | 0.9091 | 0.9009 | 0.8929 | 0.8850 | 0.8772 | 0.8696 | 0.8333 |
| 2 | 0.8900 | 0.8734 | 0.8573 | 0.8417 | 0.8264 | 0.8116 | 0.7972 | 0.7831 | 0.7695 | 0.7561 | 0.6944 |
| 3 | 0.8396 | 0.8163 | 0.7938 | 0.7722 | 0.7513 | 0.7312 | 0.7118 | 0.6931 | 0.6750 | 0.6575 | 0.5787 |
| 4 | 0.7921 | 0.7629 | 0.7350 | 0.7084 | 0.6830 | 0.6587 | 0.6355 | 0.6133 | 0.5921 | 0.5718 | 0.4823 |
| 5 | 0.7473 | 0.7130 | 0.6806 | 0.6499 | 0.6209 | 0.5935 | 0.5674 | 0.5428 | 0.5194 | 0.4972 | 0.4019 |
| 6 | 0.7050 | 0.6663 | 0.6302 | 0.5963 | 0.5645 | 0.5346 | 0.5066 | 0.4803 | 0.4556 | 0.4323 | 0.3349 |
| 7 | 0.6651 | 0.6227 | 0.5835 | 0.5470 | 0.5132 | 0.4817 | 0.4523 | 0.4251 | 0.3996 | 0.3759 | 0.2791 |
| 8 | 0.6274 | 0.5820 | 0.5403 | 0.5019 | 0.4665 | 0.4339 | 0.4039 | 0.3762 | 0.3506 | 0.3269 | 0.2326 |
| 9 | 0.5919 | 0.5439 | 0.5002 | 0.4604 | 0.4241 | 0.3909 | 0.3606 | 0.3329 | 0.3075 | 0.2843 | 0.1938 |
| 10 | 0.5584 | 0.5083 | 0.4632 | 0.4224 | 0.3855 | 0.3522 | 0.3220 | 0.2946 | 0.2697 | 0.2472 | 0.1615 |
| 11 | 0.5268 | 0.4751 | 0.4289 | 0.3875 | 0.3505 | 0.3173 | 0.2875 | 0.2607 | 0.2366 | 0.2149 | 0.1346 |
| 12 | 0.4970 | 0.4440 | 0.3971 | 0.3555 | 0.3186 | 0.2858 | 0.2567 | 0.2307 | 0.2076 | 0.1869 | 0.1122 |
| 13 | 0.4688 | 0.4150 | 0.3677 | 0.3262 | 0.2897 | 0.2575 | 0.2292 | 0.2042 | 0.1821 | 0.1625 | 0.0935 |
| 14 | 0.4423 | 0.3878 | 0.3405 | 0.2992 | 0.2633 | 0.2320 | 0.2046 | 0.1807 | 0.1597 | 0.1413 | 0.0779 |
| 15 | 0.4173 | 0.3624 | 0.3152 | 0.2745 | 0.2394 | 0.2090 | 0.1827 | 0.1599 | 0.1401 | 0.1229 | 0.0649 |
| 16 | 0.3936 | 0.3387 | 0.2919 | 0.2519 | 0.2176 | 0.1883 | 0.1631 | 0.1415 | 0.1229 | 0.1069 | 0.0541 |
| 17 | 0.3714 | 0.3166 | 0.2703 | 0.2311 | 0.1978 | 0.1696 | 0.1456 | 0.1252 | 0.1078 | 0.0929 | 0.0451 |
| 18 | 0.3503 | 0.2959 | 0.2502 | 0.2120 | 0.1799 | 0.1528 | 0.1300 | 0.1108 | 0.0946 | 0.0808 | 0.0376 |
| 19 | 0.3305 | 0.2765 | 0.2317 | 0.1945 | 0.1635 | 0.1377 | 0.1161 | 0.0981 | 0.0829 | 0.0703 | 0.0313 |
| 20 | 0.3118 | 0.2584 | 0.2145 | 0.1784 | 0.1486 | 0.1240 | 0.1037 | 0.0868 | 0.0728 | 0.0611 | 0.0261 |

| Table 2: Present value of an annuity of \$1 received (or paid) each year for the next n years | | | | | | | | | | | |
|---|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| n | 6% | 7% | 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% | 20% |
| 1 | 0.9434 | 0.9346 | 0.9259 | 0.9174 | 0.9091 | 0.9009 | 0.8929 | 0.8850 | 0.8772 | 0.8696 | 0.8333 |
| 2 | 1.8334 | 1.8080 | 1.7833 | 1.7591 | 1.7355 | 1.7125 | 1.6901 | 1.6681 | 1.6467 | 1.6257 | 1.5278 |
| 3 | 2.6730 | 2.6243 | 2.5771 | 2.5313 | 2.4869 | 2.4437 | 2.4018 | 2.3612 | 2.3216 | 2.2832 | 2.1065 |
| 4 | 3.4651 | 3.3872 | 3.3121 | 3.2397 | 3.1699 | 3.1024 | 3.0373 | 2.9745 | 2.9137 | 2.8550 | 2.5887 |
| 5 | 4.2124 | 4.1002 | 3.9927 | 3.8897 | 3.7908 | 3.6959 | 3.6048 | 3.5172 | 3.4331 | 3.3522 | 2.9906 |
| 6 | 4.9173 | 4.7665 | 4.6229 | 4.4859 | 4.3553 | 4.2305 | 4.1114 | 3.9975 | 3.8887 | 3.7845 | 3.3255 |
| 7 | 5.5824 | 5.3893 | 5.2064 | 5.0330 | 4.8684 | 4.7122 | 4.5638 | 4.4226 | 4.2883 | 4.1604 | 3.6046 |
| 8 | 6.2098 | 5.9713 | 5.7466 | 5.5348 | 5.3349 | 5.1461 | 4.9676 | 4.7988 | 4.6389 | 4.4873 | 3.8372 |
| 9 | 6.8017 | 6.5152 | 6.2469 | 5.9952 | 5.7590 | 5.5370 | 5.3282 | 5.1317 | 4.9464 | 4.7716 | 4.0310 |
| 10 | 7.3601 | 7.0236 | 6.7101 | 6.4177 | 6.1446 | 5.8892 | 5.6502 | 5.4262 | 5.2161 | 5.0188 | 4.1925 |
| 11 | 7.8869 | 7.4987 | 7.1390 | 6.8052 | 6.4951 | 6.2065 | 5.9377 | 5.6869 | 5.4527 | 5.2337 | 4.3271 |
| 12 | 8.3838 | 7.9427 | 7.5361 | 7.1607 | 6.8137 | 6.4924 | 6.1944 | 5.9176 | 5.6603 | 5.4206 | 4.4392 |
| 13 | 8.8527 | 8.3577 | 7.9038 | 7.4869 | 7.1034 | 6.7499 | 6.4235 | 6.1218 | 5.8424 | 5.5831 | 4.5327 |
| 14 | 9.2950 | 8.7455 | 8.2442 | 7.7862 | 7.3667 | 6.9819 | 6.6282 | 6.3025 | 6.0021 | 5.7245 | 4.6106 |
| 15 | 9.7122 | 9.1079 | 8.5595 | 8.0607 | 7.6061 | 7.1909 | 6.8109 | 6.4624 | 6.1422 | 5.8474 | 4.6755 |
| 16 | 10.1059 | 9.4466 | 8.8514 | 8.3126 | 7.8237 | 7.3792 | 6.9740 | 6.6039 | 6.2651 | 5.9542 | 4.7296 |
| 17 | 10.4773 | 9.7632 | 9.1216 | 8.5436 | 8.0216 | 7.5488 | 7.1196 | 6.7291 | 6.3729 | 6.0472 | 4.7746 |
| 18 | 10.8276 | 10.0591 | 9.3719 | 8.7556 | 8.2014 | 7.7016 | 7.2497 | 6.8399 | 6.4674 | 6.1280 | 4.8122 |
| 19 | 11.1581 | 10.3356 | 9.6036 | 8.9501 | 8.3649 | 7.8393 | 7.3658 | 6.9380 | 6.5504 | 6.1982 | 4.8435 |
| 20 | 11.4699 | 10.5940 | 9.8181 | 9.1285 | 8.5136 | 7.9633 | 7.4694 | 7.0248 | 6.6231 | 6.2593 | 4.8696 |

TEST YOUR KNOWLEDGE

CHAPTER 3: CAPITAL BUDGETING

1. Discuss two advantages and two disadvantages of both the Payback Period Method and Net Present Value Method for Capital Budgeting.

2. What does the concept of the *time value of money* mean?

3. Aside from pure figures, what other factors should be taken into consideration when evaluating Capital Investment decisions?

4. Discuss the role of depreciation in the Net Present Value Method.

5. Sharks Limited is considering investing in Project A. The project has an estimated life of 3 years with a zero residual value.

Cash flows for the project are as follows:

| | Project A \$ |
|--|-----------------|
| Initial Investment Year 1, July 2025 | 9 000 000 |
| Net after tax operating cash inflow at the end of each year: | |
| Year 1 | 800 000 |
| Year 2 | 650 000 |
| Year 3 | 750 000 |

The company has a 8% target rate for return for capital investments.

Calculate the Net Present Value (NPV) for Project A.

6. Sawyer Enterprises is looking to invest in new machinery to the value of \$390 000. Transport costs for the machinery is \$900 and installation will be \$2 500. If the business decides to go ahead with the investment the machinery will increase net cash flows by \$78 000 per year. The machinery has an estimated useful life of 10 years and an estimated salvage value of \$55 000. Sawyer Enterprises has a required rate of return on all projects of 10% and the predetermined acceptable payback period for investments is 4 years.

(a) Calculate the Payback Period for the machinery in years and months.

(b) Based on the Payback Method explain briefly whether the machinery is an acceptable investment.

(c) Based on the NPV Method explain whether the machinery is an acceptable investment.

7. What does the term 'cost of capital' mean?

8. What is the main reason capital investment decisions are important?

9. *The Great Outdoors* is considering manufacturing a new tent. To start production of this tent will require a new machine which will cost \$30 000. The extra sales expected to be generated by this new line of tents is expected to be:

| | |
|--------|----------|
| Year 1 | \$40 000 |
| Year 2 | \$40 000 |
| Year 3 | \$50 000 |
| Year 4 | \$35 000 |

The extra costs involved for the business to cover expenses associated with producing this new tent will be \$12 000 per annum. The machine will be depreciated at 15% per annum on the reducing balance method and it is expected to have a salvage value of \$5 000. The business has a Payback Period Policy of 2 years.

Should the business invest in the new machine?

10. Karen Smith has just invested \$400 000 in a book and DVD store. She expects to receive an income of \$144 000 per year from the investment. What is the payback period for Karen?
11. Sunway Tate has just signed a contract to build his new home in Bunbury. In three years' time he must pay the building company \$420 000. If the cost of capital is 5%, what must he invest in the bank today, so she can pay the building company?
12. Estelle Xu owns a beauty salon. She would like to update her tanning machines. The new equipment will cost \$104 726. In addition a compulsory annual service maintenance agreement of \$3 400 will need to be taken out. The equipment will have a useful life of 5 years, with a residual value of \$16 000. Estelle Xu estimates that her cash revenues would increase by the following amounts:

| Year | Revenue Increases |
|------|-------------------|
| 1 | \$27 900 |
| 2 | \$42 600 |
| 3 | \$64 800 |
| 4 | \$69 700 |
| 5 | \$72 700 |

She also expects additional cash expenses to amount to \$3 700 per year. The predetermined payback period acceptable is 4 years. The cost of the capital is 8%.

Required:

- Calculate the net cash flows for the new equipment.
- Calculate the payback period for the new equipment.
- Calculate the net present value for the project.

(d) Based on the quantitative techniques only, should the business purchase the new equipment?

(e) What are two qualitative factors that the business will need to consider when making a decision? Use examples to explain your answer.

13. Xian Wu is looking to replace a large and outdated piece of equipment with a new model. The directors have been deliberating two options put forward by competing tenders.

OPTION A

This option involves purchasing the replacement equipment from an Australian manufacturer at a cost of \$980 000.

Based on the calculations done by the accountants, the following results have been determined:

- It has a Payback Period of 5 years.
- It has a Net Present Value of \$20 000.

OPTION B

This option involves importing the replacement equipment from a Malaysian manufacturer at a cost of \$1 000 000 landed in Australia.

Based on the calculations done by the accountants, the new equipment will have a useful life of 8 years at the end of which it will have a residual value of 20% of cost. The asset is to be depreciated using the straight-line method. The cost of capital is forecast to be 10%.

The estimated annual gross cash inflows of this equipment is estimated to be \$230 000 per annum.

The estimated annual cash outflows are as follows:

- Insurance 20 000
- Electricity 10 000
- Repairs & maintenance 5 000
- Other cash overheads 55 000

Annual cash savings from wages and superannuation are estimated to be \$75 000. In Year 4, the equipment will need a major overall costing \$70 000 cash. No impact on cash inflows is envisaged.

The purchase price for the equipment is to be paid at the start of the project. The above inflows and outflows are before income tax. The tax rate is 30%.

Required:

- (a) Calculate the net after tax cash flows for Option B.
- (b) Calculate the Payback Period for Option B.
- (c) Calculate the Net Present Value for Option B.

- (d) Determine whether Option A or Option B should be selected.

14. Max Liang is considering acquiring a new computer system to run office administrative functions.

The quoted cost of the new computer system is \$85 000 and has an estimated useful life of 5 years with a residual value of \$5 000. The cost of capital is 12%. Modifications to upgrade the electrical network, which will also be undertaken by Computer Systems Resources, will cost \$5 000 and will also be due immediately. Given the tight economic conditions, and the strong competition from other hardware and software competitors, an initial deposit of 10% of the invoice cost and the full cost of the modifications will be paid immediately. Thereafter, 30% of the invoice cost will be paid in 12 months and the remaining 60% of the invoice cost will be paid in two years.

The after tax cash cost savings from wages, superannuation and office consumables are expected to be as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
|--------------|--------|--------|--------|--------|--------|
| Cash Savings | 21 000 | 21 000 | 21 000 | 21 000 | 20 200 |

The required Payback Period must be no more than 4½ years and must have a positive Net Present Value.

Required:

- (a) Calculate the Payback Period of purchasing the new computer system.
- (b) Calculate the Net Present Value of purchasing the new computer system.

- (c) Determine whether the new computer system should be selected.

15. *The Great Southern Whale Tours* board of directors has recommended the purchase OF a new boat. This new model is available at a purchase price of \$430 000, will cost \$50 000 to modify for tours. The boat has a three year useful life. The additional cost of replacement parts and service costs is estimated to be \$88 000 per year. Additional revenue that will be generated from the new boat is expected to be \$92 000 per year. Cost savings will be \$200 000 in Year 1, \$190 000 in Year 2, and \$180 000 in Year 3.

Required:

- (a) Calculate the net cash flows for the investment in the new boat. *Round all calculations to the nearest dollar.*
- (b) The business initially reviews proposed capital investment projects using the payback method. Management has decided that projects with a payback period of less than two years should be subject to further investigation. Calculate the payback period in years and months for the boat. *Round all calculations to the nearest dollar.*

- (c) The business requests that you use discounted cash flow analysis to further investigate the project. The net present value of a proposed capital investment decision is calculated on a cost of capital of 10%. Calculate the net present value for the CT scanner. *Round all calculations to the nearest dollar.*

Based on the information calculated in (a) and (b) would you recommend the purchase of the new boat? Explain your response.

16. Choose the alternative which **most correctly** answers the question or completes the statement. Circle a, b, c or d to indicate your selection.

- i. It is a characteristic of capital investment decisions that they:
- (a) Usually involve large sums of money relative to the size of the business;
 - (b) Are taken by shareholders at a general meeting;
 - (c) Can be easily reversed as circumstances change;
 - (d) Carry a relatively low risk.
- ii. Factors likely to influence capital investment decisions would **not** include:
- (a) Their likely effect on competitors;
 - (b) The company's market share price;
 - (c) Future customer preferences;
 - (d) The effect of government regulations.
- iii. When considering a project's forecast cash flows, the time value of money is recognised in calculating the
- (a) Net present value of the project
 - (b) Payback period of the project
 - (c) Rate of return on the project's assets
 - (d) Historical cost of the project's assets
- iv. The cost of capital:
- (a) Means the expenses involved in making share issues
 - (b) Is only a significant factor for public listed companies
 - (c) Includes all the real costs of raising funds for capital investments
 - (d) Is the expected rate of return on the owners' equity in the business
- v. The payback period is:
- (a) The length of time needed to repay loans used to purchase assets
 - (b) The profit expected to be made from an investment divided by its estimated useful life
 - (c) The frequency with which loan repayments need to be made
 - (d) The length of time for cash flows from an investment to exceed its initial cost.

- vi. If the NPV is positive, it signals that the:
 - (a) Initial investment has been recovered
 - (b) Required rate of return will be achieved
 - (c) Value of the firm will decrease
 - (d) Both a) and b).

17. Outline two important considerations to be taken into account when completing a business plan.

18. Sonar Ltd have been investigating purchasing a piece of machinery and have provided you with the following details.

The machinery will cost \$1,040,000 have a useful life of 3 years. The machine is expected to have a residual value of \$120,000 and is to be depreciated using the straight line method. The machinery is expected to generate a net cash inflow of \$350,000 in the first year and the cash flow stream is expected to grow at 5% per year thereafter. Additional costs for the project, including depreciation, are expected to be \$299,000 per year. The tax is paid at the rate of 30% in the same year that the profit is made.

Required:

Calculate the Net Cashflows (net of taxation) for Year 1 of this proposed investment.

19. Earthworks wants to invest in a new machine. You have been provided with information below to help decide which machine to invest in.

| | Machine A | Machine B |
|------------------------------|--|--------------------|
| Cost of investment at year 0 | \$700,000 | \$650,000 |
| Residual value | \$90,000 | 0 |
| Useful life | 8 years | 7 years |
| Desired payback period | 3 years | 3 years |
| Cost of capital | 10% | 10% |
| Cash inflows | Years 1–6 \$192,500 Year 7 \$104,500 Year 8 \$88,000 | \$182,000 per year |
| Cash outflows | Years 1–6 \$38,500 Years 7–8 \$51,000 | \$29,000 per year |

*Ignore tax implications

Required:

(a) Calculate the payback period for Machine B.

Payback Period for Machine B _____

(b) Calculate the Net Present Value for Machine B, rounding all figures to the nearest dollar.

Net Present Value for Machine B _____



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

- the nature of cost concepts for materials, labour and overheads.
- classification of cost:
 - behaviours: fixed, variable and mixed costs
 - relationships to cost objects: direct and indirect costs
 - treatment of costs: product and period
 - time orientation of costs: past and future.
- cost accounting limited to calculation of the unit price of a product/service using only job order costing processes:
 - calculation of direct materials, direct labour and overhead costs
 - calculation and application of predetermined overhead recovery rates only using normal capacity
 - calculation of unit cost and the setting of selling/quotation prices for a job costing product/service
 - use of standard costing and variance analysis for:
 - materials price and usage
 - labour rate and efficiency
 - the concept of mark up and the calculation of the unit price of a product.

4.1 CLASSIFICATION OF COSTS

Direct product costs are variable as the more that is produced, the greater the cost of direct materials and direct labour. On the other hand some direct department costs may be variable or fixed such as the production supervisor's wages. Material and labour costs are examples of direct product costs.

Indirect product costs are incidental costs like electricity. The electricity is needed to manufacture the product but will increase as production increases so it is variable. However, some indirect costs may be fixed such as depreciation of the machinery used in production. Overheads are an example of indirect costs.

Product costs are classified as direct material, direct labour and manufacturing/factory overheads.

Period costs are all costs other than product costs. These are costs which cannot be assigned to the product or to the cost of inventory. They are costs such as advertising and office expenses. These costs can be fixed or variable.

Sunk costs have already been incurred and therefore cannot be changed as they are in the past.

4.2 DIRECT LABOUR, DIRECT MATERIAL AND OVERHEAD COSTS

1. **Direct Labour:** the cost of employees who are directly involved in the manufacturing process such as a machine operator.
2. **Direct Materials:** the cost of the material used including any freight cost to get the material to the manufacturing site.
3. **Overhead costs:** also known as factory or manufacturing overheads. They are the indirect, mixed or variable costs associated with the manufacturing process, which are not part of the direct labour cost or the direct materials cost.

4.3 JOB ORDER COSTING

Job order costing systems are used by both the manufacturing and service industries, which produce either a unique product or identical products in small quantities.

Steps for job order costing:

1. Calculate the direct material cost.
2. Calculate the direct labour costs.
3. Work out the overhead costs.
4. Add all the costs together to get the final cost figure.

4.4 CALCULATION OF THE UNIT COST

The unit cost is the average cost per unit. The formula for this is:

Unit cost = Total Cost/Number of units

Example 4.1

If the total cost is \$50 000 for 50 units produced then the unit cost will be:

$$\$50\,000/50 = \$1\,000$$

Each unit has a cost of \$1 000.

4.5 MARK-UP

Mark-up is the difference between the cost of a product and its selling price. The business must decide how much mark-up to apply to the cost price of each product.

Mark up = Cost price × percentage

Example 4.2

It costs Blundy Enterprises \$100 to make a security system. They apply a 80% mark-up to attain their wholesale price.

$$\$100 \times 1.8 = \$180$$

The wholesale price will be \$180.

4.6 CALCULATION OF DIRECT MATERIALS AND DIRECT LABOUR

The direct materials cost and direct labour cost only includes those items and labour, which are directly identifiable with the product or service, so any indirect material, indirect labour or manufacturing overhead costs will not be included.

4.7 CALCULATION OF OVERHEADS

Overhead costs are more difficult to calculate as they are comprised of all the indirect costs making it difficult to trace these costs to a specific product. To overcome this most businesses will allocate overhead costs to each job on a predetermined basis and rate.

The formula for the predetermined overhead rate is:

$$\frac{\text{Estimated Overhead Costs}}{\text{Estimated Direct Labour Hours}}$$

Example 4.3

If a business had estimated that its total manufacturing overhead costs for the accounting period were \$500 000 and had estimated 100 000 total direct labour hours its predetermined overhead recovery rate for the accounting period would be:

$$\$500\,000/100\,000 = \$5 \text{ per direct labour hour.}$$

If a manufacturing job required 50 hours of direct labour time then the overhead costs for this job would be:

$$50 \times \$5 = \$250.$$

This \$250 of overhead costs would be added to the direct labour and direct material to find the total job cost.

4.8 STANDARD COSTING AND VARIANCE ANALYSIS

Standard costing for Unit 3 examines the direct material variances and the direct labour variances by comparing the actual results achieved against the standard the business hoped to achieve. It then analyses why a variance, either favourable or unfavourable, has occurred.

DIRECT MATERIAL VARIANCES

Unit 3 examines two variances under Direct Materials:

1. Price variances and
2. Usage (quantity) variances.

1. Direct Material Price Variances

A Price Variance is the difference between the actual price and the standard price multiplied by the actual quantity purchased. It can be shortened to:

$$\text{Price Variance} = (\text{AP} - \text{SP}) \times \text{AQP}$$

The Price Variance measures the difference between what is paid for a quantity of material and what should have been paid as set down by the standard.

Example 4.4

Padro's Pizza Parlour purchased 500 kgs of flour at a price of \$0.50 per kg. The Standard Price set by the Pizza Parlour was \$0.60.

| | |
|----------------|-------------------------|
| Actual Price | 500 kg × \$0.50 = \$250 |
| Standard Price | 500 kg × \$0.60 = \$300 |

| Actual Price | Standard Price | Difference in Price | Total Price Variance |
|--------------|----------------|---------------------|----------------------|
| \$0.50 | \$0.60 | \$0.1 | \$50 F |

In the above example a Favourable Variance (F) has resulted. If the Actual Price had been greater than the Standard Price then an Unfavourable Variance would have occurred. This Favourable Variance is due to the fact that the flour purchased was \$0.10 less per kg than the standard price set.

Reasons for Favourable Material Price Variances

1. Decrease in the overall market price.
2. Negotiating better prices or buying in greater quantities.
3. Purchasing from a different supplier or purchasing a lower quality material.

Reasons for Unfavourable Material Price Variances

1. Increase in the overall market price.
2. Outdated standards.
3. Purchasing materials of a better quality.
4. Not buying in bulk.
5. Inefficient price negotiations.

2. Direct Material Usage (Quantity) Variances

The Usage Variance measures the difference between the quantity used in manufacturing in comparison to the quantity that should have been used according to the standard set. It is measured in dollars.

The formula for calculating this is:

$$\text{Usage Variance} = (\text{AQ} - \text{SQ}) \times \text{SP}$$

Example 4.5

Padro's Pizza Parlour purchased 600 kg of flour at a price of \$0.50 per kg. The Standard Price set by the Pizza Parlour was \$0.50 and the Standard Quantity Allowed was set at 500 kgs.

| | |
|-------------------|--------------------------|
| Actual Quantity | 600 kg × \$0.50 = \$300 |
| Standard Quantity | 500 kg × \$0.50 = \$250. |

In the above example an Unfavourable Variance (U) of \$50 has resulted. The Actual Quantity purchased was greater than the Standard set. The business used 100 kgs more than the standard.

Reasons for Favourable Material Usage Variances

1. Improvements in production methods.
2. Superior work performance due to hiring of better skilled workers or improved training of the work force.
3. Using better quality materials making the handling easier.

Reasons for Unfavourable Material Usage Variances

1. Poor quality materials being purchased.
2. Outdated standards.
3. Use of unskilled labour.
4. Material wastage.

DIRECT LABOUR VARIANCES

Unit 3 examines two variances under Direct Labour:

1. Rate variance and
2. Efficiency variance.

1. Direct Labour Rate Variance

A Labour Rate Variance occurs for the Actual Labour Worked when the Actual Labour Rate is different to the Standard Rate set.

The formula to work out the Labour Rate Variance is:

(Actual Rate per direct Labour Hour worked – Standard Rate per Direct Labour Hour worked) × Actual Direct Labour Hours worked. This can be simplified to:

$$\text{Rate Variance} = (\text{AR} - \text{SR}) \times \text{ADLH}$$

Example 4.6

Tiny Tots makes jumpers for children under the age of 5. Tiny Tots made 10 000 jumpers during the last financial year.

Information relating to the direct labour cost and production time per jumper is as follows:

| | Actual Hours Per Unit | Standard Hours Per Unit | Actual Rate Per Hour | Standard Rate Per Hour |
|---------------|-----------------------|-------------------------|----------------------|------------------------|
| Direct Labour | 0.50 | 0.60 | \$12 | \$10 |

Labour rate variance shall be calculated as follows:

Step 1: Calculate Actual hours

$$\begin{aligned} \text{Actual Hours} &= 10\,000 \text{ units} \times \text{Actual hours per unit} \\ &= 5\,000 \text{ hours.} \end{aligned}$$

Step 2: Calculate the actual cost

$$\begin{aligned} \text{Actual Cost} &= \text{Actual Hours} \times \text{Actual Rate} \\ &= 5\,000 \text{ hours (Step 1)} \times \$12 \text{ per hour} \\ &= \$60\,000. \end{aligned}$$

Step 3: Calculate the standard cost of actual number of hours

$$\begin{aligned} \text{Standard Cost of actual hours} &= \text{Actual Hours} \times \text{Standard Rate} \\ &= 5\,000 \text{ hours (Step 1)} \times \$10 \text{ per hour} \\ &= \$50\,000. \end{aligned}$$

Step 4: Calculate the variance

$$\begin{aligned} \text{Labour Rate Variance} &= \text{Actual Rate} - \text{Standard Rate per Direct Labour Hour worked} \\ &= \$60\,000 \text{ (Step 2)} - \$50\,000 \text{ (Step 3)} \\ &= \$10\,000 \text{ Unfavourable} \end{aligned}$$

An Unfavourable Labour Rate Variance has occurred. It would now be up to management to work out why this happened.

Reasons for Favourable Labour Rate Variances

1. Hiring of cheaper labour such as semi skilled or unskilled workers.
2. Decrease in the overall wage rates, due to an over supply of workers.

Reasons for Unfavourable Labour Rate Variances

1. Unions negotiating a pay rise.
2. Increase in the National Minimum wage.
3. Hiring more skilled workers who are paid more than unskilled workers.
4. Inefficient hiring by the HR Department.

2. Direct Labour Efficiency Variances

A Labour Efficiency Variance is the result of using more or less direct labour hours as manufacturing input, than the standard quantity (in hours) allowed for the units of output produced. This variance measures the efficiency of the businesses labour force.

The formula for working out the Labour Efficiency Rate is:

Actual Direct Labour Hours worked – Standard Direct Labour Hours Allowed for actual output)
× Standard Rate per Direct Labour Hour.

This can be simplified to:

$$\text{Efficiency Variance} = (\text{ADLH} - \text{SDLHA}) \times \text{SR}$$

Example 4.7

Tiny Tots makes jumpers for children under the age of 5. Tiny Tots made 10 000 jumpers during the last financial year.

Information relating to the direct labour cost and production time per jumper is as follows:

| | Actual Hours Per Unit | Standard Hours Per Unit | Actual Rate Per Hour | Standard Rate Per Hour |
|---------------|-----------------------|-------------------------|----------------------|------------------------|
| Direct Labour | 0.50 | 0.60 | \$12 | \$10 |

Labour rate variance shall be calculated as follows:

Step 1: Calculate Actual hours

Actual Hours = 10 000 units × 0.5 hours per unit
= 5 000 hours.

Step 2: Calculate the standard cost of actual number of hours

Standard Cost of Actual Hours = Actual Hours × Standard Rate
= 5 000 hours (Step 1) × \$10 per hour
= \$50 000.

Step 3: Calculate the standard hours

Standard hours = 10 000 units × 0.60 hours per unit
= 6 000 hours.

Step 4: Calculate the standard cost

$$\begin{aligned}\text{Standard Cost} &= \text{Standard Hours} \times \text{Standard Rate} \\ &= 6\,000 \text{ hours (Step 3)} \times \$10 \text{ per hour} \\ &= \$60\,000.\end{aligned}$$

Step 5: Calculate the variance

$$\begin{aligned}\text{Labour Efficiency Variance} &= \text{Standard Cost of Actual Hours} - \text{Standard Cost} \\ &= \$50\,000 \text{ (Step 2)} - \$60\,000 \text{ (Step 4)} \\ &= \$10\,000 \text{ Favourable.}\end{aligned}$$

Reasons for Favourable Labour Efficiency Variances

1. Improvements in production methods.
2. Superior work performance due to hiring of better skilled workers or improved training of the work force.
3. Using better quality materials making handling easier.

Reasons for Unfavourable Labour Efficiency Variances

1. Poor quality materials.
2. Outdated standards.
3. Faulty equipment.
4. Unskilled or unmotivated workers.



TEST YOUR KNOWLEDGE

CHAPTER 4: COST ACCOUNTING

1. Define the following concepts:
 - i. Direct Product Costs
 - ii. Indirect Product Costs
 - iii. Period Costs
 - iv. Sunk Costs

2. What type of business uses a Job Order Costing System?

3. Explain the concept of 'mark up' using an example of how to calculate unit price.

4. What does Standard Costing aim to measure?

5. What is a favourable variance?

6. What is an unfavourable variance?

7. What two variances are analysed for Direct Materials?

8. What is a price variance?

9. List three reasons for a favourable material price variance.

10. List three reasons for an unfavourable price variance.

11. What is a Direct Material quantity or usage variance?

12. List three reasons for a favourable material usage variance.

13. List three reasons for an unfavourable material usage variance.

14. List two variances, which are analysed as Direct Labour Variances.

15. What does the Direct Labour Rate Variance measure?

16. Describe two reasons why a favourable labour rate variance may occur.

17. Outline two reasons why an unfavourable labour rate variance may occur.

18. What is a Direct Labour Efficiency Variance?

19. List three reasons for a favourable Labour Efficiency Variance?

20. List three reasons for an unfavourable Labour Efficiency Variance?

21. Why are overheads difficult to calculate? How does a business overcome this problem?

22. Once the predetermined overhead rate has been calculated what happens to this amount?

23. List the steps involved for job order costing.

24. If the total cost for 20 units is \$6 000, calculate the cost per unit.

25. If a business estimates that its total manufacturing overhead costs for an accounting period were \$375 000 and had estimated 80 000 total direct labour hours for the period, what would its predetermined overhead recovery rate be per job?

26. Manuel's Gourmet Pies purchased 3 000 kgs of flour at a price of \$0.70 per kg. The standard price set by management was \$0.60. Has a favourable or unfavourable variance occurred?

27. Harper Adams Pty Ltd is a manufacturer of wholesale baked goods. One of the product lines is muffins. The standard cost for each batch of 100 muffins is as follows:

Direct materials: 30 kgs at \$15 per kilogram.

Direct Labour: 2 hours at \$30 per hour.

The following information for the muffin product line in the month ending January 2016 has been extracted from the company's accounting records:

90 000 muffins baked.

4 500 kgs of direct materials purchased and used at an average actual cost of \$15 per kg.

270 direct labour hours worked at an average actual direct labour cost of \$27 per direct labour hour.

Required:

Calculate the standard cost variance for the month ending January, 2016, indicating whether each variance is favourable or unfavourable and a reason why this variance may have occurred.



28. Finns Pty Ltd manufactures and installs large swimming pool pumps. They are currently looking at adjusting their selling price and consequently need to calculate the total price of manufacturing and installing one pool pump. The estimated annual costs are as follows:

| | |
|--|--------|
| Factory and Installation insurance | 2 000 |
| Depreciation of equipment | 1 000 |
| Office costs | 3 000 |
| Repairs and maintenance of equipment | 1 000 |
| Factory and installation manager's salary | 45 000 |
| Site cleaning | 3 000 |
| Factory and installation miscellaneous costs | 13 000 |

Overheads costs are divided equally between manufacturing and installation. They are applied on the basis of machine hours for the manufacturing section and labour hours for the installation of the pool pumps.

| | |
|--|--------|
| Total machine hours per year for manufacturing | 2 500 |
| Total labour hours per year for installation | 10 000 |

Additional information to manufacture and install one pool pump:

| | Direct materials | Direct labour hours | Machine hours | Labour rate |
|---------------|------------------|---------------------|---------------|-------------|
| Manufacturing | \$750 | 10 | 5 | \$35 |
| Installation | \$20 | 20 | 1 | \$40 |

Required:

- Calculate the total overheads.
- Calculate the predetermined overhead rate for the manufacturing sector.
- Calculate the predetermined overhead rate for the installation sector.
- Calculate the cost of manufacturing one air conditioner.
- Calculate the cost of installing one air conditioner.

29. Quan is a business making specialist gluten free beers. They sell their product from the brewery itself and also through other retailers. The business has two products, a light beer and a premium one. The business uses a job costing system to cost each batch of product. Each batch consists of 1 800 bottles of beer. Cost details are as follows:

| Item | Q Light | Q Premium |
|--|-----------------|-----------------|
| Ingredients (water, hops, yeast, malt etc) | \$400/batch | \$480/batch |
| Packaging (bottles & labels) | 60 cents/bottle | 60 cents/bottle |
| Direct labour @ \$48/hour | 3 hours/batch | 4 hours/batch |
| Brewing time | 4 hours/batch | 6 hours/batch |

- Business costs are estimated to be as follows:
 - Rental of brewery \$60 000
 - Wages of Brewery supervisor \$200 000
 - General Brewery costs \$20 000
 - Depreciation of brewery plant \$76 000
 - Selling Expenses \$30 000
 - General Office Expenses \$24 000
- Overheads are allocated on the basis of brewing time. It is assumed that the brewing plant is available for a total of 4 000 hours per year.
- The business applies a mark-up of 60% on cost when fixing the selling price.

Required:

- (a) Calculate the pre-determined overhead rate per brewing hour.
- (b) Calculate the standard cost per batch and per bottle of both products.
- (c) Calculate the selling price per bottle for each product needed to achieve the required mark-up of 60% (rounded to the nearest whole cent).

30. Tent World manufactures tents. They make a Premium Tent and a Family Tent. The production costs and sales are estimated to be as follows:

| | Premium | Family |
|------------------------------------|-----------------------|-----------------------|
| Direct materials per unit | \$15 / m ² | \$15 / m ² |
| Direct materials per unit (fabric) | 15 m ² | 12 m ² |
| Manufacturing labour per unit | 3.5 hours @ \$40/hour | 3 hours @ 40/hour |
| Estimated annual production | 2000 units | 3000 units |
| Budgeted Selling price | \$550 | \$450 |

Fixed costs are estimated as follows:

Manufacturing overheads:

Factory rent and maintenance costs \$102 000
Office staff wages \$162 000

General overheads:

Salaries & wages \$240 000
Marketing costs \$125 000

Manufacturing overheads are allocated on the basis of labour hours. The total number of labour hours expected to be worked in the year is 16 500 hours.

At the end of the year, the following actual figures were recorded:

| | Premium | Family |
|--------------------------------|-----------------------|-----------------------|
| Manufacturing labour cost | \$41.50/hour | \$41.50/hour |
| Actual annual production | 2 100 units | 2 900 units |
| Actual hours worked | 6 090 | 10 440 |
| Direct materials per unit | \$17 / m ² | \$17 / m ² |
| Direct materials used (fabric) | 14 m ² | 11 m ² |

Required:

- Calculate the **labour rate** and **efficiency** variances for the Premium tent and the **materials price** and **usage** variances for the Family tent for the year.
- Comment on the labour rate and efficiency variance for the Premium tent and the materials price and usage variances for the Family tent.

31. **Quest Corp** manufactures electronic gadgets at its production facility. Annual overhead costs are estimated to be \$120 000, and these costs are allocated to various products based on machine hours, which are expected to be a total of 8 000 hours for the year. Among its main products are smartwatches. These smartwatches are costed on the basis of a batch of 200 watches, and the standard costs for each batch are estimated as follows:

Standard Costs for a Batch of 200 Smartwatches:

- 800 units of electronic components at \$6 per unit
 - Plastic casing at \$10 per watch
 - Labour hours – 20 hours at \$25 per hour
- (a) Calculate the cost of the smartwatches per batch and per unit, using job order costing processes.
- (b) Assuming the company applies a mark-up of 20% on cost, calculate the selling price of each smartwatch in dollars and cents.

Actual Costs for the First Batch of 200 Smartwatches ended up being:

- 820 units of electronic components at a cost of \$5.80 per unit
 - Plastic casing cost of \$11 per watch
 - 22 labour hours at \$24 per hour.
- (c) Calculate the following variances per batch:
- i. Direct materials price variance
 - ii. Direct materials usage variance
 - iii. Direct labour rate variance
 - iv. Direct labour efficiency variance



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

- cost-volume-profit (CVP) processing for a single and multi-product (maximum three products) business
 - calculation of contribution margin
 - calculation of contribution margin per unit
 - calculation of weighted average contribution per unit
 - calculation of margin of safety
 - calculation of selling price, variable cost, fixed cost, profit or sales volume
 - calculation of break-even point
 - calculation of the effect on profit/loss of make or buy decisions
 - calculation of the effect on profit/loss of closing a department/dropping a segment product decision
 - calculation of the gain or loss on special order decisions.
- cost-volume-profit (CVP) analysis for decision making purposes
 - cost behaviour
 - contribution margin
 - break-even point
 - margin of safety.
- interpretation of CVP results and testing of sensitivity to changing decisions about:
 - volumes, product mixes, pricing and costs and the impact of capacity constraints
 - make or buy decisions
 - close down product/business unit decisions
 - accept or reject special orders decisions
- explain the relationship between volume of activity, costs and profit

5.1 COST VOLUME PROFIT ANALYSIS

The relationship between volume of activity, costs and profit

Cost Volume Profit analysis looks at the relationship between costs (fixed and variable), selling price, sales volume and profit at differing activity levels.

For example if cost goes up profit may go down. If volume increases costs may increase. If volume goes up in turn profit may increase. Whenever the activity level or cost changes so too may the profit change. This is what CVP investigates.

This analysis allows an accountant to evaluate the differences in income and expenses between different alternatives. This helps managers to make informed decisions when evaluating short-term alternatives and plans.

5.2 CALCULATION OF CONTRIBUTION MARGIN

The Contribution Margin is the financial contribution made by the sale of each unit towards covering the fixed costs. It is the difference between Selling Price and the direct Variable Costs.

The Contribution Margin per unit can be worked out with the following formula:

Selling Price per unit – Variable Expenses per unit or $SP - VC$

Example 5.1

Sally Brown owns a business, which makes surfboards. She has estimated the following:

| | |
|------------------------------|-------------------------|
| Cost of making a surfboard | \$90 (variable expense) |
| Selling Price of a surfboard | \$200 |

Weekly costs (fixed)

| | |
|-------------|-------|
| Rent | \$300 |
| Wages | \$750 |
| Electricity | \$50 |
| Phone | \$50 |

$$CM = SP - UC$$

$$CM = \$200 - \$90$$

$$CM = \$110$$



Calculation of Break Even Point in Units

The break-even point is when the income being received is equal to the expenses of the business. At this point the business makes no profit but importantly is not making any loss.

The break-even point formula is:

$$\frac{\text{Fixed expenses}}{\text{Selling price per unit} - \text{Variable Expense per unit}} \quad (\text{this is the Contribution Margin})$$

Example 5.2

Joe Gordon owns a business named *Kart World* which makes Go-karts. He has estimated the following:

| | |
|----------------------------|-------|
| Selling Price of Go-kart | \$200 |
| Materials used per Go-kart | \$50 |

Weekly costs

| | |
|--------------------------------|---------------|
| Rent | \$300 |
| Wages of staff making Go-karts | \$50 per kart |

| | |
|-------------------|-------|
| Office staff wage | \$400 |
| Electricity | \$50 |
| Phone | \$50 |

Calculate the number of Go-karts which need to be sold in order to break even.

Step One

Work out the fixed costs

Office staff wage \$400 + Electricity \$50 + Phone \$50 + Rent \$300 = \$800

Step Two

Work out the Variable Costs

Materials used per Go-Kart \$50 + Wages staff making Karts \$50 = \$100

Step Three

$$\frac{\text{Fixed expenses}}{\text{Selling price per unit} - \text{Variable Expense per unit}}$$

$$\frac{\$800}{\$200 - \$100}$$

$$\frac{\$800}{\$100}$$

8 Go-Karts need to be sold in order to break even.

Once 8 Go-Karts have been sold the business will have covered all the fixed costs.

Calculation of break-even point in sales dollars

The formula to work this out is:

Selling Price per Unit multiplied by the break-even point in units.

Example 5.3

The break-even point for Kart World is 8 Go-karts. The selling price of each Kart is \$200.

$$\$200 \times 8 \text{ Karts} = \$1\,600$$

Sales Volume required to meet a Profit Target

Example 5.4

If Kart World wants to make a profit of \$5 000 per week how many Karts need to be sold?

$$\frac{\text{Fixed Expenses} + \text{Profit Target}}{\text{Selling Price per unit} - \text{Variable Expenses per unit}}$$

$$\frac{\$800 + \$5\,000}{\$200 - \$100}$$

$$\frac{\$5800}{\$100}$$

58 Go-Karts need to be sold each week in order to make a profit of \$5 000 per week.

Break Even Analysis for Multiple Products

Example 5.5

Racquet Are Us sells Tennis Racquets and Squash Racquets. The business has fixed costs of \$100 000 per annum.

| | Tennis Racquet | Squash Racquet |
|-----------------------------------|----------------|----------------|
| Selling Price of the Product | \$250 | \$200 |
| Variable Expense per product | \$50 | \$20 |
| Number of Racquets sold per annum | 6 000 | 1 000 |

Calculate the break-even point of the business in units and the profit.

Step 1

Calculate the product mix.

The business sold a total of 7 000 units.

Tennis Racquets

$$\frac{6\,000}{7\,000} \times \frac{100}{1} = 86\%$$

Squash Racquets therefore is 14%.

The sales mix is 86% Tennis Racquets and 14% Squash Racquets.

Step 2

Calculate the Contribution Margin of each product per unit.



| | Racquets | |
|---------------------------------|----------|--------|
| | Tennis | Squash |
| Selling Price per unit | \$250 | \$200 |
| Less Variable Expenses per unit | \$50 | \$20 |
| Contribution Margin per unit | \$200 | \$180 |

Step 3

Calculate the Weighted Average Contribution Margin

| | CM x Sales Mix | |
|---|----------------|-------|
| Tennis racquet | \$200 x 86% | \$172 |
| Squash racquet | \$180 x 14% | \$25 |
| Weighted Average Contribution Margin per unit | | \$197 |

Step 4

Calculate the break-even point

$$\frac{\text{Fixed Expenses}}{\text{Weighted Average Contribution Margin}}$$

$$\frac{\$100\,000}{\$197}$$

508 racquets sold

Step 5

Calculate the break-even point per product based on the sales mix

Tennis racquet break-even point $86\% \times 508 = 437$

Squash racquet break-even point $14\% \times 508 = 71$

To break even the business needs to sell 437 tennis racquets and 71 squash racquets.

Step 6

Work out the profit made on the existing product mix.

Revenue for Tennis racquets

Tennis racquets $(SP - VC \times QS)$

$\$250 - \$50 \times 6\ 020$

$\$1\ 204\ 000$

Revenue for Squash racquets

$\$200 - \20×980

$\$176\ 400$

Total revenue = $\$1\ 204\ 000 + \$176\ 400$

= $1\ 380\ 400 - FC (\$100\ 000)$

= $1\ 280\ 400$

Profit = $1\ 280\ 400$

5.3 CHANGES IN THE PRODUCT MIX

Example 5.6

Racquets Are Us has made the decision to try to change the product mix to 75% Tennis racquets and 25% Squash racquets based on the fact that they will be exporting to India where Squash is popular.

The selling price, variable costs and total fixed costs all remain unchanged.

What impact is this new product mix may have on the break even point and profit made by the business?

| | Tennis Racquet | Squash Racquet |
|-----------------------------------|----------------|----------------|
| Selling Price of the Product | \$250 | \$200 |
| Variable Expense per product | \$50 | \$20 |
| Number of Racquets sold per annum | 5 250 | 1 750 |

Fixed costs are \$100 000 per annum.

Step One

Calculate the new Weighted Average Contribution Margin

| | CM x Sales Mix | |
|---|---------------------|-------|
| Tennis racquet | $\$200 \times 75\%$ | \$150 |
| Squash racquet | $\$180 \times 25\%$ | \$45 |
| Weighted Average Contribution Margin per unit | | \$195 |

Step Three

Calculate the new break-even point

$$\frac{\text{Fixed Expenses}}{\text{Weighted Average Contribution Margin}}$$

$$\frac{\$100\,000}{\$195}$$

513 racquets sold

The change in the Product Mix will result in an increase in the break-even point from 508 racquets to 513 racquets.

Step Four

Calculate the new break-even point per product based on the sales mix

Tennis racquet break-even point $75\% \times 513 = 385$

Squash racquet break-even point $25\% \times 513 = 128$

To break even the business needs to sell 385 tennis racquets and 128 squash racquets.

Step Five

Work out the profit made on the new product mix.

Revenue for Tennis racquets

Tennis racquets $(SP - VC \times QS)$

$\$250 - \$50 \times 5\,250$

$\$1\,050\,000$

Revenue for Squash racquets

$\$200 - \$20 \times 1\,250$

$\$225\,000$

Total revenue = $\$1\,050\,000 + \$225\,000$

= $1\,275\,000 - FC (\$100\,000)$

= $1\,175\,000$

New Profit $\$1\,175\,000 - \text{Existing Profit } \$1\,280\,000 = \$105\,000$

The new product mix if it were to go ahead will result in a decrease in profit of \$105 000.

The reason for this decrease in profit is due to the business changing to wanting to sell more of a product (squash racquet) which has a lower contribution margin than the tennis racquet.



5.4 CALCULATION OF THE MARGIN OF SAFETY

The margin of safety of a product is the amount by which the expected sales are greater than the break-even point. A business can then calculate the percentage by which sales can afford to decrease before the product begins to make a loss. The higher the margin of safety, the better for the business.

The Margin of Safety can be calculated in dollar figures using:

Total sales – break-even sales = Margin of Safety

Or it can be calculated as a percentage using:

$$\frac{\text{Margin of safety in dollars}}{\text{Total Sales}}$$

Example 5.7

Melody Tunes estimates it will sell \$85 000 of product each month and has a break-even point in sales dollars of \$46 000.

The Margin of Safety in dollar figures is:

$$\$85\,000 - \$46\,000 = \$39\,000$$

Therefore sales can fall by \$39 000 before a loss starts to incur.

The Margin of Safety as a percentage is:

$$\frac{\$39\,000}{\$85\,000} = 46\%$$

Therefore sales can fall by 46% before a loss starts to incur.

The Margin of Safety can also be used when management has to decide which product of two or more is the best to continue with. It will usually continue with the product, which has the highest Margin of Safety.

5.5 CVP DECISIONS

Closing down a product, accepting special orders, buying a part or making it and the impact of capacity constraints are all scenarios that management have to decide how to deal with. Managers will use CVP analysis to help them in this sort of decision-making.

5.6 CLOSING DOWN A PRODUCT

Tilly Brown makes two flavours of jams. She has noticed that sales for her Blackberry Jam are falling and wants to know if she should close down production of it.

Tilly Brown Jams
Income Statement for 30 June 2025

| | Strawberry Jam | Blackberry Jam |
|-------------------|----------------|----------------|
| Sales | 94 000 | 6 000 |
| Less expenses | | |
| Variable expenses | 10 000 | 3 000 |
| Fixed expenses | 9 400 | 600 |
| Profit/Loss | 74 600 | 2 400 |

When analysing what should happen the fixed expenses are not taken into account as they still need to be paid even if production of the Blackberry Jam stops.

The Contribution Margin for the Blackberry Jam is:

Sales of \$6 000 – Variable expenses of \$3 000 = 3 000.

The Blackberry Jam contributes \$3 000 in income which is available to cover things like fixed costs. As it is not making a significant amount of revenue Tilly will need to take factors other than just money into account. For example are her customers likely to be upset to the point that it impacts on Strawberry Jam sales? Is the time commitment needed for Blackberry Jam worth the income brought in? If the Blackberry Jam production ends would Strawberry Jam sales increase with extra production of Strawberry Jam?

5.7 ACCEPTING OR REJECTING SPECIAL ORDERS

Example 5.8

Books Ltd produce hardback and paperback books. Publishers pay \$6 for a paperback book to be produced and \$10 for a paperback book. The Variable costs of the paperback book is \$0.50 and for the hardback book is \$6.

Books Ltd have worked out that to maximise its profit the best use of its resources is to print 40 000 paperbacks a month and 10 000 hardbacks. The business has received a special order for 20 000 hardback books on condition that the buyer only has to pay \$9 and not \$10. If the business accepts this offer it will only be able to print 28 000 paperbacks. Should the offer be accepted?

Solution:

Step 1:

Work out how much is made in a normal month.

10 000 hardback books \times \$10 = \$100 000 – VC of \$60 000 = \$40 000

40 000 paperback books \times \$6 = \$240 000 – VC of \$20 000 = \$220 000

Total is \$40 000 + \$220 000 = \$260 000

Before Fixed Costs Books Ltd makes a profit of \$260 000.

Step 2:

Work out how much the business would earn if it accepted the special order.

20 000 hardback books \times \$9 = \$180 000 – VC of \$120 000 = \$60 000

28 000 paperback books \times \$6 = \$168 000 – VC of \$14 000 = \$154 000

Total is \$60 000 + \$154 000 = \$214 000

Step 3:

Books Ltd make \$260 000 before Fixed Costs in a normal month. If they accept the special offer they will make \$214 000 before Fixed Costs. Therefore the offer should be rejected as the opportunity cost is a loss of \$46 000.

5.8 MAKING OR BUYING A PRODUCT

Example 5.9

Baby Girl Corp makes an upmarket doll. The body of the doll and the head of the doll are made in two separate manufacturing processes. Management is considering outsourcing the making of the body so that they can focus on the more specialised task of making the head. The Variable Cost of making the doll's body is \$6 and the fixed cost is \$7. The total fixed costs would still need to be paid even if the doll's head was no longer being manufactured by *Baby Girl Corp*.

A Taiwanese supplier is able to supply the doll body for \$12 per body.

Solution:

Cost of making the doll's head: VC of \$6 + FC of \$7 = \$13

Cost of buying the doll's head: \$12 + FC of \$7 = \$19.

Due to fixed costs still having to be paid even if the doll's head is purchased means it will not be favourable to buy from the supplier the business is best off continuing to make their own doll's head. If the fixed costs were reduced by purchasing the head then the outcome may have been more favourable.

5.9 IMPACT OF CAPACITY CONSTRAINTS

All businesses have some sort of constraints whether it be how many products it can produce or how many labour hours can be worked. Businesses will usually select the path, which makes the most profit. Therefore they need to be aware of how they can maximise their profit while taking into consideration their capacity constraints.

Example 5.10

Trophies Galore can produce two types of trophies one of glass and one made of metal.

| | Glass Trophy | Metal Trophy |
|--|--------------|--------------|
| Selling Price per trophy | \$25 | \$22 |
| Variable expenses per trophy | \$5 | \$3 |
| Number of machine hours needed to make each trophy | 2 hours | 2 hours |
| Estimated Sales | 2 000 | 1 500 |

To make 2 000 glass trophies and 1 500 metal trophies each month would take 7 000 machine hours. Trophies Galore has a maximum of 5 000 machine hours per month available. What combination of glass and metal trophies would help them maximise their profit?

Solution:

Contribution Margin of glass trophies is:

$$SP - VE = CM$$

$$\$25 - 5 = \$20$$

Contribution Margin of metal trophy is:

$$\$22 - \$3 = \$19$$

The contribution margin of the glass trophy is \$20 whereas for metal trophies it is only \$19. This means the business will make a higher profit maximising sales of the glass trophies.

The business should produce the maximum number of glass trophies which is 2 000 taking up 4 000 machine hours. This leave 1 000 machine hours which could be used to produce 500 metal trophies.

Therefore the business should produce 2 000 glass trophies and 500 metal trophies in order to maximise their profit.

TEST YOUR KNOWLEDGE

CHAPTER 5: COST VOLUME PROFIT (CVP) ANALYSIS

1. What relationship does Cost, Volume, Profit Analysis investigate?

2. Outline what the 'contribution margin' calculates.

3. Identify what the 'margin of safety' measures.

4. What does the break-even point mean?

5. The selling price of a bicycle is \$250, the variable costs are \$30 and the fixed costs are \$80.

- i) What is the contribution margin?

- ii) What is the break even point?

- iii) If the business wishes to make a profit of \$8 000 how many bicycles need to be sold?



6. Carpet Enterprises makes handmade carpets. Currently they only sell their product in Perth. Total manufacturing costs for the 2 000 carpets that the business plans to make this year are as follows:

| | |
|-------------------|----------------|
| Direct materials | \$200 per unit |
| Direct labour | \$600 per unit |
| Variable overhead | \$100 per unit |

In addition, the company expects to have fixed manufacturing overheads of \$200 000 per annum. The business will sell each carpet for \$2 500 each.

Calculate:

- i) The total contribution margin.
- ii) The contribution margin per carpet
- iii) The margin of safety in both dollars and units.
- iv) What price must the company charge if they wish to make a profit of \$800 000?

7. Bags Galore can manufacture two products: handbags and purses.

| | Handbags | Purses |
|---|------------------|-----------------|
| Selling price per unit | \$12 | \$6 |
| Variable expenses per unit | \$7 | \$4 |
| Forecast sales in units | 900 per month | 800 per month |
| Machine hours required to make each product | 2 hours per unit | 1 hour per unit |



Bags Galore has a maximum of 2 000 machine hours per month available. To make 900 handbags and 800 purses per month would require 2 600 machine hours.

What combination of handbags and purses should Bags Galore manufacture in order to maximise its profit?

8. *Green Machines* makes ride on lawn mowers. One of the parts, the outside casing, could be made by them or purchased from a supplier. The cost to be charged by the supplier would be \$600 per case. *Green machines* has budgeted to make 2000 lawnmowers, with each mower needing 1 external casing.

The cost to make the casing would be as follows:

| | |
|---------------------------------|------------------------|
| Direct materials | \$120 per casing |
| Direct labour | \$50 per casing |
| Variable manufacturing overhead | \$80 per casing |
| Fixed manufacturing costs | \$100 000 for the year |

If the casing was made and purchased from the supplier \$25 000 of the fixed manufacturing costs allocated to the casing would be eliminated.

Calculate whether the business should make or buy the casing.

9. *Day Diary* manufactures Diaries. It sells the diaries for \$40 each. The business has received a once only order from an international school located in Malaysia to supply 200 diaries. The school has offered to pay \$35 per diary for this order and want the order shipped before the end of the month.

The monthly fixed costs of the firm are \$2 800 and the variable costs are \$14 per diary. The business normally sells 1 800 diaries per month. The business can produce 1 900 units per month at full capacity.

Should the special order be accepted? Justify your answer.



10. AMK Ltd produces a Trains Game and a Unicorn Game. Information pertaining to these items is shown below:

| | Train Game | Unicorn Game |
|--------------------|------------|--------------|
| Sales | \$300 000 | \$200 000 |
| Variable costs | 180 000 | 110 000 |
| Products sold | 30 000 | 10 000 |
| Machine Hours/Game | 2.5 | 3.5 |

Fixed Costs of production = \$150 000

- Calculate the sales mix and the contribution margin per unit for each product.
- Calculate the weighted average contribution margin.
- If fixed costs are equal to \$50 000, what is the break-even point in units?
- Determine the sales mix of games to breakeven.
- Calculate the sales units required to reach a target profit of \$250 000
- Calculate the sales mix to reach the target profit.
- What is the Contribution Margin per machine hour?
- If there were 100 000 machine hours available what would be the production mix?

11. Snail Enterprises manufactures garden sheds. The following information shows the costs associated with producing these sheds:

| | |
|------------------|---|
| Direct Materials | Each shed requires 150kg of materials. The materials cost \$30 per kg. |
| Direct Labour | An employee takes 20 hours to complete each shed. Employees are paid \$27 per hour. |
| Machine Time | Each shed requires 10 hours of machine time. Machine time costs \$30 per hour. |
| Fixed Costs | \$240 000 |
| Selling Price | \$7 500 |

The business is currently manufacturing 9 000 sheds, but have the capacity to manufacture 11 000 per year. A large garden retailer has contacted Snail Enterprises and would like to purchase 3 500 sheds and has offered to pay \$7 000 for each shed. If the firm accepts the order they will need to purchase an additional metal sheet welder at a cost of \$4 000. This would not be needed after the order was accepted and would have zero salvage value.

Required:

Determine whether Snail Enterprises should accept the special order.

12. List 3 qualitative factors that Snail Enterprises should consider before accepting or rejecting the special order for the extra garden sheds.

13. Underwater Cleaners makes cleaners for use in swimming pools. The manufacturing costs per unit are as follows:

| | |
|---------------------------------|-------|
| Direct Materials | \$160 |
| Direct Labour | \$110 |
| Variable Manufacturing Overhead | \$50 |

The capacity of the factory is 3 500 units per year and fixed overhead costs are estimated at \$280 000. The selling price of the cleaners is \$525.

Required:

- (a) How many cleaners does the firm need to make and sell each year to break even?
- (b) If the factory works to its full capacity, what will be the annual profit? Currently the electric pumps, which are the most important part of the cleaners, are assembled at the firm's factory in Osborne Park using components imported from South Korea. The business has found out that it could buy the electric pumps fully assembled from another manufacturer at a cost of \$40 each. This would reduce Direct Materials cost by 20% and Direct Labour and Manufacturing Overhead costs by 10%. Fixed overhead costs would not be affected.
- (c) Calculate the new breakeven point and annual profit at full capacity if the firm were to use this option.
- (d) Based on your calculations, do you think the firm should buy in the pumps or not? Name and explain **two** factors other than profit which the firm might consider in arriving at this decision.

14. Since the popularity of their YouTube channel the Norris Nuts have started selling merchandise. Currently they sell caps, t-shirts, and scarves. Cost/selling price details and sales mix for the three products are as follows:

| | Caps | T-shirts | Scarves |
|------------------------------------|--------------|--------------|--------------|
| Variable costs per unit | \$4.50 | \$6.00 | \$7.50 |
| Selling price per unit | \$10 | \$12 | \$14 |
| Sales mix: units produced per year | 18 000 units | 40 000 units | 24 000 units |

Total fixed costs for the year are expected to be \$230 000.

Required:

Calculate the breakeven point in units of production at the sales mix stated in the table above. How many of each of the products would be produced at that breakeven point?

Breakeven Point: Total Units
 Caps: Units
 T-shirts: Units
 Scarves: Units

15. Tin Can Ltd. is a private company that manufactures food boxes. The cost to manufacture one box are as follows:

| | \$ |
|--------------------------------|--------|
| Direct labour per unit | 5.00 |
| Direct material per unit | 3.00 |
| Variable overheads per unit | 2.00 |
| Sales commission per unit sold | 1.00 |
| Annual rent | 38 000 |
| Shire & water rates | 10 000 |
| Administration & Selling costs | 90 000 |
| Depreciation on machinery | 19 000 |

At present, the selling price per box is \$16.00 and the annual output is 12 000 boxes, although the maximum productive capacity is 16 000 boxes.

The management accountant has just received an order from a potential new customer who is just starting up in competition to the company's existing customers. The special, one off order is for 3 500 boxes for which it is willing to pay \$13.00 per unit. In addition, Thompson & Thompson Ltd. will need to purchase a small logo stamping machine costing \$8 000. It will be redundant if no further orders are received.

Required:

1. In your capacity as management accountant, determine whether the company should accept the special order.
 - (a) Should the special order be accepted? Justify your answer.
 - (b) Would your decision be different if the special order was for 4 300 boxes? Should the special order be accepted? Justify your answer.
 - (c) Provide two other considerations that management may need to bear in mind before accepting the special order.

16. Clock World has two departments one which makes analogue clocks and one which makes digital clocks. The Income Statement for each department is shown below:

| | Analogue clocks | Digital Clocks | Total |
|---------------------|-----------------|----------------|--------|
| Sales | 10,000 | 45,000 | 55,000 |
| Costs | | | |
| Direct Materials | 4,000 | 8,500 | 12,500 |
| Direct labour | 3,500 | 14,000 | 17,500 |
| Electricity | 500 | 1,500 | 2,000 |
| Supplies | 500 | 2,500 | 3,000 |
| Rental | 2,500 | 3,000 | 5,500 |
| Share of site costs | 1,500 | 3,500 | 5,000 |
| Profit/Loss | (2,500) | 12,000 | 9,500 |

The business is concerned that according to the Income Statement a loss is being made on analogue clocks. They are wondering if they should close down this department.

The rental cost total and the share of site costs total would not alter if one department closes. All other costs are directly associated with the products and would disappear if the department closed.

The Management of Clocks World is seeking your advice. Write a recommendation to them using calculations and data to justify your response.

17. Cooks Unite sell kitchen cabinets. They currently cabinets that they sell for \$900 each. The variable costs are \$200 per cabinet and fixed costs are \$140,000 per month. Current production is 600 cabinets per month

The management of the company are currently considering reducing the cost of the cabinets to \$750 to try to increase sales. In order to be able to implement this option they would need to decrease the quality of the product slightly, but this would also lead to a decrease in the variable cost by \$60 per cabinet. Fixed costs would remain the same. It is hoped that this will lead to a 20% increase in the number of cabinets sold.

- (a) For the current option calculate the:
- contribution margin
 - break-even point in units
- (b) For the current option and the suggested new option you are required to calculate the:
- profit
 - margin of safety in dollars
- (c) Calculate the break-even in sales dollars for current production.
- (d) The company aims to achieve a profit of \$7,000 per month. Calculate the number of cabinets that would be required to be sold each month for the current production to reach this target profit.

18. In producing 30,000 desks in the next year, Office Harbour expects to incur the following costs:

| | |
|----------------------|-------------|
| Direct Materials | \$500,000 |
| Direct Labour | \$600,000 |
| Other variable costs | \$580,000 |
| Fixed costs | \$1,200,000 |

Total sales \$3,630,000

- Calculate the variable cost per desk.
- Calculate the contribution margin per desk.

19. China Inc makes fancy teacups. The following information relates to their expected sales of cool shaped water bottles for the month of July 2024:

| | |
|----------------------------------|--------------------|
| Selling price | \$60 |
| Variable costs | \$25 |
| Fixed costs | \$19,000 per month |
| Expected level of sales for July | 3,000 tea cups |

Calculate the following figures for China Inc:

- Their expected level of profit for July.
- Their expected level of profit if: sales volume increases 4%, variable cost per tea cup decreases 3% and fixed costs increase 2%.
- If the business wants to achieve a profit of \$17,000 then how many tea cups do they need to sell?
- How many tea cups must China Inc sell to break-even?
- Calculate China Inc's margin of safety as a %.

20. A business sells a product which has a selling price of \$90 and a variable cost which is 40% of the selling price. Calculate the contribution margin ratio of this product.

21. Sweets are us makes and sells two kinds of boxed treats. The cost information for these products is as opposite:

| | Chocolate mix | Lolly mix |
|---------------------------------|---------------|--------------|
| Boxes – per unit | \$1.20 | \$1.20 |
| Contents – per unit | \$3.50 | \$5.30 |
| Other Variable costs – per unit | \$0.10 | \$0.10 |
| Direct labour – per unit | \$0.15 | \$0.20 |
| Expected sales volume per annum | 72,000 boxes | 48,000 boxes |

Fixed overhead costs are expected to be \$265,000 per annum. The chocolate sells for \$7.50 per bag and the lolly mix for \$9.00.

Required:

- Calculate the sales mix for each product
- Calculate the contribution margin per unit for each of the two boxes.
- Calculate the weighted average contribution margin.
- Using the weighted average contribution margin calculate the break-even point in terms of the number of each products sold.

22. Barrows Inc makes and supplies wheelbarrows. The following details relate to two products.

| | Medium Wheelbarrow | Large Wheelbarrow |
|--|--------------------|-------------------|
| Sales price per unit | \$300 | \$400 |
| Variable costs per wheelbarrow | \$150 | \$175 |
| Expected sales | 250 products | 190 products |
| Factory time to make (per wheelbarrow) | 1 hr | 2 hrs |

- Fixed expenses per month, \$65,450
- Target profit for the month, \$70,000

Required:

- Calculate the sales mix of each wheelbarrow.
- Calculate the contribution margin per unit of each wheelbarrow.
- Calculate the weighted average contribution margin per wheelbarrow.
- Using the weighted average contribution margin, calculate the break-even point in wheelbarrows.
- Calculate how much of each wheelbarrow can be produced at the desired sales mix.
- Using the weighted average contribution margin, calculate the volume of wheelbarrows required to reach the target profit.
- Calculate the contribution margin per factory hour for each wheelbarrow.
- If the business only has 420 factory hours available, they will have to make a decision about which wheelbarrow to produce first to maximise profit. State which wheelbarrow should be produced first and justify why. How many of this wheelbarrow should the business produce? How many of the other wheelbarrow can be produced in the remaining time?

ACCOUNTING & FINANCE

UNIT 4





SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

Financial systems and fundamental principles

- the purpose of accounting standards in:
 - protecting external users
 - assisting directors in discharging their obligations
 - providing confidence to investors in Australian capital markets
- the purpose of the *Conceptual Framework* and its key elements
 - the nature of the reporting entity
 - the objective of general purpose financial reporting
 - evaluation and application of the fundamental and enhancing qualitative characteristics of financial information
 - evaluation and application of asset, liability, income and expense recognition criteria
- Statement of Cash Flows as per AASB 107, including:
 - benefits of the cash flow statement information
 - concepts of cash and cash equivalents

Recording, processing and communicating financial information

- preparation of financial statements in accordance with the *Conceptual Framework* and in accordance with the standards
 - statement of comprehensive income (one statement version only)
 - statement of financial position

- statement of changes in equity
 - retained earnings
 - equity
 - share capital
 - reserves

- cash flow statement from comparative balance sheets and income statements using the direct method only – GST not included

Note: preparation of the above financial statements is restricted to the following issues:

- revaluation of property, plant and equipment: non-depreciable assets only
- cash dividends
- bonus share issues
- transfers to or from general reserve
- preliminary expenses
- issue of ordinary shares, including share issue costs
- purpose and nature of the following balance day adjustments:
- accrued expenses
 - prepaid expenses/stock of supplies
 - accrued income
 - income in advance
 - doubtful debts
 - depreciation
 - for the purpose of calculating income tax expense, profit before tax is deemed to equal taxable income

Evaluating financial information for planning, coordinating, controlling and investing

- interpretation of the movements in cash flow items
- the nature and importance of the following groups which regulate and influence the general purpose financial reporting of companies in Australia:
- the Financial Reporting Council (FRC)
 - Australian Securities and Investments Commission (ASIC)
 - International Accounting Standards Board (IASB)
 - Australian Accounting Standards Board (AASB)
 - Australian Securities Exchange (ASX)
 - lobby groups
- the function of the external audit, including:
- protecting external users
 - providing confidence to stakeholders in Australian capital markets
- the role of the external auditor appointed by the shareholders and reappointed at the annual general meeting (AGM)
- perform an independent audit of the financial statements

6.1 THE PURPOSE AND IMPORTANCE OF ACCOUNTING STANDARDS

Accounting standards are legal guidelines on specific accounting matters that influence the way General Purpose Financial Reports are produced.

Purpose of Accounting standards

- Protection of external users:
 - Assisting creditors and investors and stakeholders to analyse and make informed judgements
 - Providing for comparable reports so that users can compare information over time and between entities
- Facilitate the Australian Capital markets:
 - Promoting market efficiency, thus reducing the cost of capital and enabling Australian entities to compete internationally
- Provide confidence to investors in Australian capital markets:
 - facilitate accountability
 - promote accurate reporting

The role of the framework in Australia

The purpose of the Framework is to:

- (a) assist the AASB in the development of future Australian Accounting Standards;
- (b) promote harmonisation of regulations, accounting standards and procedures;
- (c) assist preparers of financial statements in applying Australian Accounting Standards;
- (d) assist auditors in forming an opinion;
- (e) assist users of financial statements in interpreting the information contained in financial statements; and
- (f) provide information about the formulation of Australian Accounting Standards.

The Framework deals with:

- the objective of financial statements;
- the qualitative characteristics;
- the definition, recognition and measurement of financial statement elements; and
- concepts of capital and capital maintenance.

The nature of the reporting entity

A reporting entity is an entity (including an economic entity) for which it is reasonable to expect the existence of users dependent on general purpose financial reports, for information which would be useful to them in making decisions about the allocation of scarce resources.

The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions.

Fundamental and enhancing qualitative characteristics

The qualitative characteristics of useful financial information are likely to be most useful to investors, lenders, and creditors, for making decisions on the basis of information in the entity's financial report.

The objective of applying qualitative characteristics is to produce financial reports that convey a true and fair view of the financial position, performance and cash flow of the company. Financial information should meet the fundamental and enhancing qualitative characteristics:

Fundamental qualitative characteristics:

- relevance – materiality
- faithful representation

Enhancing qualitative characteristics:

- comparability
- verifiability
- timeliness
- understandability

1. Relevance

- Information is relevant when it influences the decision making of users by helping them evaluate events or to confirm or correct their evaluations of the situation.
- Users should be able to predict and/or confirm.
- The relevance of information is also affected by its nature and materiality. Information is material if its omission or misstatement or obscuration could influence the decision of users
- Materiality is dependent upon the size and/or nature of the item.

EXAMPLE 6.1: Information about the amount of assets held in the company could be relevant to users because of the predictive value if users want to forecast the ability of the entity to take advantage or opportunities or react to unfavourable situations. It could have confirmatory value if it changes previous evaluations.

2. Faithful representation

- Both substance and legal form
- Must be complete, neutral and free from error

EXAMPLE 6.2: For information about a loan to be complete, the company should not just include the amount of the loan but also include other information such as the maturity date. For the loan information to be error free, it must be accurate at the time of reporting so not fraudulent. A neutral reporting of the loan means there is no bias or manipulation.

3. Comparability

- Users must be able to compare the financial reports of an entity through time in order to be able to identify trends.
- They also need to be able to compare different entities in order to be able to evaluate their relative financial position, financial performance and cash flow.

EXAMPLE 6.3: Users of reports need to be able to recognise where different accounting policies have been used, such as different depreciation methods. Any changes in depreciation policies must be identified so they can compare changes over different reporting periods.

4. Verifiability

- Different observers would reach consensus that the information is a faithful representation
- Direct or indirect

EXAMPLE 6.4: An independent auditor should be able to confirm the numbers used with evidence from business documentation.

5. Timeliness

- Information to be available in enough time to influence decisions

6. Understandability

- Information should be readily understandable by users
- Users should have a reasonable knowledge of business and economic structures.
- Complex information should not be excluded from the financial reports.

EXAMPLE 6.5: It should not be assumed that users of the financial reports would be unable to comprehend complex financial details. The assumption is that users have a basic knowledge of accounting and so complexity is not a reason for omitting information important to economic decision making.

Evaluation and application of asset, liability, income and expense recognition criteria

1. **Income** – Income is ‘increases in assets, or decreases in liabilities, that result in increases in equity, other than those relating to contributions from holders of equity claims.’

EXAMPLES: Sales revenue, fees revenue, interest received, dividends received, royalties received, gain on disposal of an asset.

2. **Expenses** – Expenses are ‘decreases in assets, or increases in liabilities, that result in decreases in equity, other than those relating to distributions to holders of equity claims.’

EXAMPLES: Cost of sales, wages, depreciation, electricity, advertising, insurance, losses on disposal of an asset.

3. **Assets** – An asset is ‘a present economic resource controlled by the entity as a result of past events.’

An economic resource is defined as ‘a right that has the potential to produce economic benefits.’

The three aspects of the definition of an asset are:

- right
- potential to produce economic benefits, and
- control.

EXAMPLES: Property, Plant and equipment (PPE), receivables, patents, copyright, intangibles such as goodwill

4. **Liabilities** – A liability is ‘a present obligation of the entity to transfer an economic resource as a result of past events.’

The three criteria that must exist for a liability to exist are:

- ‘the entity has an obligation
- the obligation is to transfer an economic resource
- the obligation is a present obligation that exists as a result of past events.’

EXAMPLES: Bank overdraft, payables, loan, mortgage.

5. **Equity** – the residual interest in the assets of the entity after deducting all its liabilities.

These should only be included in Financial Statements when it is **probable** the event will occur and it can be measured with **reliability**.

EXAMPLES: Retained earnings is a type of equity.

Recognition Criteria

An asset is recognised in the Balance Sheet when it provides information that is:

- relevant to the asset and any resulting income, expenses or changes in equity and
- a faithful representation of the asset and of any resulting income, expenses or changes in equity

A liability is recognised in the Balance Sheet when it provides information that is:

- relevant to the liability and any resulting income, expenses or changes in equity and
- a faithful representation of the liability and of any resulting income, expenses or changes in equity

Expenses are recognised in the Statement of Profit or Loss when they provide information that is:

- relevant to the liability and any resulting income, expenses or changes in equity and
- a faithful representation of the liability and of any resulting income, expenses or changes in equity

Income is recognised in the Statement of Profit or Loss at the same time as:

- the initial recognition of an asset or an increase in the carrying amount of an asset, or
- the derecognition of a liability or a decrease in the carrying amount of a liability

6.2 PREPARATION OF FINANCIAL STATEMENTS

- **Revaluation of property, plant and equipment: non-depreciable assets only.**

The asset revaluation reserve can be used to: transfer back to retained profits, pay a cash dividend, pay a share dividend or bonus share issue, or record a subsequent write-down of the same class of assets which had been revalued upwards previously.

General Journal

| Date | Details | Debit | Credit |
|---------|---------------------|---------|---------|
| June 30 | Land and Building | 300 000 | |
| | Revaluation Reserve | | 300 000 |
| | Revaluation of land | | |

- **Cash dividends.**

| Interim dividend | Final dividend |
|--|--|
| Declared and paid during period Percentage of capital or cents per share Recognised and paid on day of declaration | Not declared and paid until AGM Percentage of capital or cents per share Recognised on day of declaration and paid later |

- **bonus share issues**

Paid out of reserves.

- **transfers to or from general reserve**

A general reserve can be used to: pay a cash dividend, pay a bonus share dividend, or transfer funds back to retained profits/earnings.

e.g. A transfer from retained earnings to put aside profits:

General Journal

| Date | Details | Debit | Credit |
|---------|-----------------------------|---------|---------|
| June 30 | Retained Earnings | 200 000 | |
| | General Reserve | | 200 000 |
| | Transfer to General Reserve | | |

Transferred back by reversing entry:

General Journal

| Date | Details | Debit | Credit |
|---------|-------------------------------|---------|---------|
| June 30 | General Reserve | 200 000 | |
| | Retained Earnings | | 200 000 |
| | Transfer to retained earnings | | |

- **preliminary expenses**

Costs required to set up the company and start trading, e.g. Prospectus and legal fees.

- **issue of ordinary shares, including share issue costs**

Expenses that must be paid to issues shares, e.g. Taxes and underwriting fees.

- **purpose and nature of balance day adjustments**

a. **Prepaid expenses:** Debit Prepaid Expense (Asset) when payment made. Debit Expense and Credit Prepaid Expense on Balance Day, e.g. Insurance, Office supplies.

- b. Accrued Expense: Debit Expenses and Credit Accrued Expense on Balance Day, e.g. Internet bill, wages.
 - c. Income in advance: Credit Income in Advance (Liability) when expense incurred. Debit Income in Advance and Credit Income on Balance Day, e.g. Subscriptions.
 - d. Accrued Income: Debit Accrued Income and Credit Income on Balance Day, e.g. Subscriptions.
- for the purpose of calculating income tax expense, profit before tax is deemed to equal taxable income

Statement of Comprehensive Income

The Statement of Comprehensive Income presents:

- (a) profit or loss;
- (b) total other comprehensive income;
- (c) comprehensive income for the period, being the total of profit/loss and other comprehensive income.

Statement of Comprehensive Income For the year ended 30 June 2031

| | \$ |
|--|-------|
| | 000's |
| Revenue | 240 |
| LESS: Cost of sales | 145 |
| Gross profit | 95 |
| Other income | 36 |
| Selling and distribution* expenses | 50 |
| Administration* expenses | 11 |
| Finance costs | 24 |
| Profit before income tax | 46 |
| Income tax at 30% | 14 |
| Profit (Loss) for the period | 32 |
| Other Comprehensive Income | |
| Revaluation of land | 59 |
| Gains (losses) on available for sale - financial assets | (10) |
| Other Comprehensive Income for the period, net of tax | 49 |
| Total Comprehensive Income for the period | 63 |

*These expense categories can be combined into one total known as other expenses.

Statement of Financial Position

The Statement of Financial Position itemises the final balance in each asset, liability and equity account for the company at a point in time.

Statement of Financial Position As at 30 June 2031

| | NOTE | \$ 000's |
|--------------------------------------|------|---------------|
| CURRENT ASSETS | | |
| Cash and cash equivalents | | 87 |
| Trade and other receivables | | 678 |
| Inventories | | 9 234 |
| Non-current assets held for sale | | 5 |
| Total Current Assets | | <u>10 004</u> |
| NON-CURRENT ASSETS | | |
| Investments | | 32 |
| Property, plant and equipment | (1) | 5 275 |
| Intangible assets | | 21 |
| Other non-current assets | | 700 |
| Total Non-Current Assets | | <u>6 028</u> |
| Total Assets | | 16 032 |
| EQUITIES | | |
| CURRENT LIABILITIES | | |
| Current tax liability | | 6 |
| Trade and other payables | | 4 765 |
| Short term loans | | 800 |
| Total Current Liabilities | | <u>5 571</u> |
| NON-CURRENT LIABILITIES | | |
| Long term borrowings | | 3 657 |
| Mortgage | | 2 800 |
| Total Non-Current Liabilities | | <u>6 457</u> |
| Total Liabilities | | <u>13 028</u> |
| Net Assets | | 3 004 |
| EQUITY | | |
| Share capital | | 2 350 |
| Reserves | | 14 |
| Retained earnings | | 640 |
| Total Equity | (2) | 3 004 |

Notes to the Statement of financial position:

1. Share capital

EXAMPLE: Share Capital

| Number of shares issued at end of | 2030 | 2031 |
|-----------------------------------|-----------|-----------|
| Ordinary | 1 220 500 | 1 250 000 |
| Preference shares | 1 100 000 | 1 100 000 |

2. Other components of equity

EXAMPLE: Movements in Reserves

| | General Reserve | Revaluation Reserve |
|-------------------------|-----------------|---------------------|
| Balance at 1 July 2030 | 5 000 | 2 200 |
| Transfer from reserves | | 1 200 |
| Transfer to reserves | 8 000 | |
| Balance at 30 June 2031 | 13 000 | 1 000 |

3. Property, plant and equipment

EXAMPLE: Property, plant and equipment

| | \$ |
|--------------------------|-----------|
| Land | |
| At fair value | 4 000 000 |
| Total land | 4 000 000 |
| Buildings | |
| At cost | 1 300 000 |
| Accumulated depreciation | 25 000 |
| Total buildings | 1 275 000 |

4. Dividends

EXAMPLE: Dividends (Using the share capital amounts in the Share capital note above)

Dividends recognised in the current year 2030:

| | Cents per share | Total amount |
|------------------|-----------------|--------------|
| Final Ordinary | 10 | 22 050 |
| Final Preference | 10 | 10 000 |

Dividends proposed by the directors for the next period, 2031:

| | Cents per share | Total amount |
|------------------|-----------------|--------------|
| Final Ordinary | 5 | 12 500 |
| Final Preference | 5 | 5 000 |

Statement of Cash Flows as per AASB 107

The cash flow statement shows the cash inflows and cash outflows of a company for a period of time.

Benefits of cash flow information:

- Useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents.
- Shows the needs of the company to utilise those cash flows.
- Evaluation of the ability of an company to generate cash and cash equivalents and the timing and certainty.

Purpose:

When used with other financial statements (e.g. Balance sheet and statement of profit or loss and comprehensive income) can help:

- Assess the ability of a company to generate net cash inflows from either the services it provides or the goods it sells because this will show the ability of the company to pay its short and long term debts.

Concept of cash and cash equivalents

Cash: cash on hand and demand deposits such as deposits held at call with a financial institution.

EXAMPLE: Bank deposits.

Cash Equivalents: short term highly liquid investments that are readily convertible to known amounts of cash that can be easily converted into cash and have an insignificant risk of change in value. **EXAMPLES:** Government bonds, Shares.

Financing activities – activities that result in changes in the size and composition of the contributed equity and borrowings of the entity.

Cash received from: capital contributions; issuing of shares; borrowings (loans); issuing debentures, unsecured notes and other borrowings.

Cash paid for: drawings, repayment of debentures, unsecured notes and other borrowings (loans); dividends paid to shareholders.

Investing activities – the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

Cash received from: sales of property, plant and equipment; sales of intangibles, interest received.

Cash paid for: purchase of property, plant and equipment; purchase of shares and debentures of other entities.

Operating activities – the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.

Cash received from: Sales of goods, provision of services, royalties, fees, commissions.

Cash paid for: goods and services; employee wages; expenses; income taxes; other taxes; and interest paid.

Reconstruction of accounts

To find cash flows from Operating Activities reconstruct:

- Accounts Receivable: Bank amount added to Receipts from Customers
- Accounts Payable: Bank amount added to Payments to Suppliers and Employees
- Trading: Purchases will include cash and credit purchases. Only cash purchases are added to Payments to Suppliers and Employees

Non cash items include: Discount revenue, discount expense, bad debts, depreciation.

To find cash flows from Investing Activities reconstruct:

- Non Current Assets
- Accumulated Depreciation of Non Current Assets
- Carrying Amount of Asset Sold

Non cash items include depreciation and carrying amount of asset held.

To find cash flows from Financing Activities reconstruct:

- Capital: to determine transfers to reserves, capital increases, profit/loss.
- Loans

Balance day adjustments: Reconstruct income and expenditure accounts to determine the cash inflow or cash outflow that has taken place.

Direct Method Statement of Cash Flows

Cash flows from operating activities

| | |
|--------------------------------------|------|
| Cash receipts from customers | XX |
| Cash paid to suppliers and employees | (XX) |
| Cash generated from operations | XX |
| Interest paid | (XX) |
| Income taxes paid | (XX) |
| Net cash from operating activities | YY |

Cash flows from investing activities

| | |
|---|------|
| Purchase of property, plant and equipment | (XX) |
| Proceeds from sale of equipment | XX |
| Interest received | XX |
| Dividends received | XX |
| Net cash used in investing activities | YY |

Cash flows from financing activities

| | |
|---------------------------------------|------|
| Proceeds from borrowings | XX |
| Proceeds from share issue | XX |
| Payment of borrowings | (XX) |
| Dividends paid | (XX) |
| Net cash used in financing activities | YY |

Net increase in cash and cash equivalents

YYY

Cash and cash equivalents at beginning of period

XX

Cash and cash equivalents at end of period

YYY

6.3 THE NATURE AND IMPORTANCE OF GROUPS WHICH REGULATE AND INFLUENCE THE GENERAL PURPOSE FINANCIAL REPORTING OF COMPANIES IN AUSTRALIA

Financial Reporting Council (FRC)

The FRC is the peak body responsible for overseeing the effectiveness of the financial reporting framework in Australia. It is a statutory body under Part 12 of the ASIC Act.

Main functions:

- oversight of the accounting and auditing standards setting processes for the public and private sectors,
- strategic advice in relation to the quality of audits conducted by Australian auditors,
- advise the Minister on these and related matters to the extent that they affect the financial reporting framework in Australia,
- monitor the development of international accounting and auditing standards,
- work to further the development of a single set of accounting and auditing standards for world-wide use and promote the adoption of these standards.

Australian Securities and Investment Commission (ASIC)

ASIC is Australia's corporate, markets and financial services regulator. ASIC contributes to Australia's economic reputation and wellbeing by ensuring that Australia's financial markets are fair and transparent and supported by confident and informed investors and consumers. ASIC is an independent Australian government body set up under and administering the ASIC Act and carries out most of its work under the Corporations Act.

Main functions:

- promote confident and informed participation by investors and consumers in the financial system
- administer the law effectively and with minimal procedural requirements
- enforce and give effect to the law
- efficiently and quickly receive, process and store information that is given to them
- make information about companies and other bodies available to the public as soon as practicable
- ASIC regulates Australian companies, financial markets, financial services organisations and professionals who deal and advise in investments, superannuation, insurance, deposit taking and credit.

International Accounting Standards Board (IASB)

The IASB is an independent standard-setting board, appointed and overseen by a diverse group of Trustees of the International Accounting Standards Committee Foundation. Australia has been applying international standards since 2005.

The IASB cooperates with national accounting standard-setters to achieve convergence in accounting standards around the world. The IASB is supported by numerous national accounting standard-setting interests. The goal of the IASB is to provide the world's integrated capital markets with a common language for financial reporting.

Australian Accounting Standards Board (AASB)

The AASB is an independent accounting standards organisation based in Melbourne. The board comprises 13 members. The Chairman is appointed by the Australian government by the Minister for Superannuation and Corporate Law.

Purpose:

- To develop a conceptual framework for the purpose of evaluating proposed accounting standards
- Develop and issue accounting standards that have the force of the law
- Formulate accounting standards for other purposes
- Participate and contribute to the development of a single set of accounting standards for worldwide use.

Australian Securities Exchange (ASX)

Public companies in Australia with their shares listed on the stock exchange must comply with the listing requirements of the ASX.

The Listing Rules require listed companies to provide to the ASX:

- Half-yearly reports
- A preliminary final statement
- Additional details to the annual report
- Additional details for mining exploration companies
- Any other information that is likely to have an impact.

If companies do not comply with these listing rules, they are likely to be delisted so that their shares can no longer be traded on the stock exchange.

Lobby Groups

The due process employed by standard setters provides interested parties with an opportunity to lobby standard setters. Lobbyists attempt to influence the deliberations of the AASB, particularly with reference to standards that are relevant to their industry or interest.

The role and function of external audits and auditors

The purpose of an audit is to enhance the confidence of users in the financial report. This is achieved by the expression of an opinion by the auditor on whether the financial report is prepared, in all material respects, in accordance with the financial reporting framework. Usually the opinion is on whether the financial report is presented fairly, in all material respects, or gives a true and fair view in accordance with the framework.

Objectives of the external auditor are to decide whether the financial report as a whole is free from material misstatement, whether due to fraud or error, to express an opinion on whether the financial report is prepared, in all material respects, in accordance with the financial reporting framework, to report on the financial report, and communicate the auditor's findings.

TEST YOUR KNOWLEDGE

CHAPTER 6: FINANCIAL STATEMENTS

1. Discuss two reasons to use Accounting Standards in company accounting.

2. Define “reporting entity” using an example.

3. Explain the purpose of General Purpose Financial Reports.

4. Define each of the following, using examples:

(a) relevance

(b) faithful representation

(c) comparability

(d) verifiability

(e) timeliness

(f) understandability

5. Explain whether each of the following is an asset, liability, income or expense:

(a) staff wages

(b) mining truck

(c) loan

(d) doctors fees

6. What is the purpose of a Cash Flow Statement?

7. Define “cash equivalent”, using examples.

8. Explain the accounting treatment of each of the following balance day adjustments:
(a) accrued expenses

(b) prepaid expenses/stock of supplies

(c) accrued income

(d) income in advance

(e) doubtful debts

(f) depreciation.

9. Define “preliminary expenses” using examples.

10. Compare and contrast the following types of shares:

(a) Ordinary

(b) Preference

(c) Bonus.

11. Explain the role of each of the following groups in the REGULATION of company financial reporting in Australia

(a) Financial Reporting Council (FRC)

(b) Australian Securities and Investments Commission (ASIC)

(c) International Accounting Standards Board (IASB)

(d) Australian Accounting Standards Board (AASB)

(e) Australian Securities Exchange (ASX)

12. Why would a company conduct an audit?

13. What is the role of an external auditor?

14. Complete a Cash Flow Statement from the following information and interpret the movements in cash flow items.

Comparative Balance Sheets as at:

| | 2030 000's | 2031 000's |
|--------------------------------|---------------|---------------|
| ASSETS | | |
| Cash equivalents | | 494 |
| Inventory | 600 | 650 |
| Prepaid assets | 100 | 120 |
| Debtors | 700 | 870 |
| Plant and equipment | 3500 | 3500 |
| Accumulated depreciation – P&E | (600) | (900) |
| Machinery | 800 | 780 |
| Accumulated depreciation – M | (600) | (700) |
| | 4500 | 4814 |
| LIABILITIES | | |
| Overdraft | 60 | |
| Creditors | 660 | 630 |
| Short term loans | 30 | 15 |
| Mortgage | 100 | 100 |
| EQUITY | | |
| General reserve | 550 | 550 |
| Retained earnings | 700 | 1119 |
| Share capital | 2400 | 2400 |
| | 4500 | 4814 |

**Statement of Profit or Loss (Income Statement)
for the year ended 31 December 2031**

| | \$000's |
|---------------------------------|--------------|
| Income | |
| Sales | 9000 |
| Less: Cost of sales | 7000 |
| Gross profit | <u>2000</u> |
| Add: Other income | |
| Interest | 400 |
| Dividends | 200 |
| | <u>600</u> |
| Less: Other expenses | |
| ADMINISTRATIVE | |
| Insurance | 300 |
| Wages | 500 |
| | <u>800</u> |
| GENERAL | |
| Depreciation | 400 |
| Loss on disposal of machinery | 2 |
| Supplies | 500 |
| | <u>902</u> |
| FINANCIAL | |
| Interest | 300 |
| | <u>300</u> |
| PROFIT BEFORE INCOME TAX | <u>598</u> |
| Income tax | 179.4 |
| PROFIT | <u>418.6</u> |

- During the year, machinery with a carrying amount of \$70,000 was sold.
- During the year, machinery was purchased for cash.



15. The following information has been extracted from the comparative financial statements of Massimo Ltd.

**Massimo Ltd
Balance Sheet**

| | As at 30 June 2025 | As at 30 June 2026 |
|--|---------------------------|---------------------------|
| | \$ | \$ |
| Assets | | |
| Cash at bank | 55 000 | 14 000 |
| Inventory | 61 000 | 72 000 |
| Prepaid insurance | 10 000 | 15 000 |
| Accounts receivable | 80 000 | 128 000 |
| Plant and equipment | 350 000 | 390 000 |
| Accumulated depreciation – Plant and equipment | (60 000) | (90 000) |
| | 496 000 | 529 000 |
| Liabilities | | |
| Accounts payable | 54 000 | 61 000 |
| Loan payable | 12 000 | 12 000 |
| Mortgage | 33 000 | 33 000 |
| Equity | | |
| Retained earnings | 62 000 | 554 000 |
| Share capital | 335 000 | 335 000 |
| | 496 000 | 529 000 |

**Massimo Ltd
Income statement for the year ended 30 June 2026**

| | \$ |
|------------------------------------|----------------|
| Income | |
| Sales | 1340 000 |
| Less: Cost of sales | <u>760 000</u> |
| Gross profit | 580 000 |
| Less: expenses | |
| Insurance | 30 000 |
| Wages | 135 000 |
| Depreciation - plant and equipment | 78 000 |
| Supplies | 260 000 |
| Interest | 22 000 |
| Loss on disposal of equipment | 3 000 |
| | <u>25 000</u> |
| Profit before tax | 52 000 |

Equipment that originally cost \$25 000 with a carrying amount of \$10 000 was sold during the year. Credit purchases of inventory were \$771 000 for the year. Dividends of \$45 000 were declared and paid.

- (a) Complete the Cash flow Statement for Massimo Ltd for the year ended 30 June 2026.
- (b) Interpret the movements in the cash flow items and the final cash balance result.

16. The following information is extracted from the internal reports of Harper Manufacturing Ltd.

**Harper Manufacturing
Statement of Financial Position**

As at 30 June

| | 2023 | 2024 |
|---------------------------------------|-----------------------|-----------------------|
| | \$ | \$ |
| Assets | | |
| Cash | 15 000 | 4 900 |
| Petty cash | 1 200 | 1 500 |
| Accounts receivable | 39 000 | 42 500 |
| Inventory | 95 000 | 103 000 |
| Investments | 50 000 | 50 000 |
| Prepaid insurance | 500 | 600 |
| Land (at cost) | 320 000 | 370 000 |
| Buildings (at cost) | 265 000 | 265 000 |
| Less accumulated depreciation | <u>27 000</u> | <u>39 600</u> |
| Plant and equipment | 67 000 | 89 000 |
| Less accumulated depreciation | <u>46 000</u> | <u>23 000</u> |
| Intangible assets | <u>11 500</u> | <u>11 500</u> |
| Total Assets | <u><u>791 200</u></u> | <u><u>875 400</u></u> |
| Liabilities | | |
| Accounts payable | 25 700 | 34 400 |
| Accrued office salaries | 1 600 | 1 800 |
| Current income tax liability | 23 100 | 30 312 |
| Mortgage loan payable (due July 2029) | 220 200 | 121 888 |
| Debentures (due February 2026) | <u>0</u> | <u>85 000</u> |
| Total Liabilities | <u><u>270 600</u></u> | <u><u>273 400</u></u> |
| Net Assets | <u><u>520 600</u></u> | <u><u>602 000</u></u> |
| Equity | | |
| Share capital | 430 000 | 430 000 |
| Revaluation reserve | 0 | 50 000 |
| General reserve | 65 000 | 85 000 |
| Retained earnings | <u>25 600</u> | <u>37 000</u> |
| Total Equity | <u><u>520 600</u></u> | <u><u>602 000</u></u> |

Harper Manufacturing
Income Statement For the year ended 30 June 2024

| | \$ | \$ | \$ |
|-------------------------------------|--------|----------------|----------------------|
| Revenue | | | |
| Cash sales | | 156 000 | |
| Credit sales | | 325 000 | 481 000 |
| Less: Cost of Sales | | | <u>130 000</u> |
| Gross profit | | | 351 000 |
| Add Other Income | | | |
| Interest revenue | | 2 680 | |
| Gain on sale of plant and equipment | | 9 750 | |
| Dividends income | | 4 210 | 16 640 |
| | | | <u>367 640</u> |
| Less Other Expenses | | | |
| Selling and distribution | | | |
| Marketing expenses | 11 000 | | |
| Sales salaries | 63 000 | | |
| Retail store expenses | 21 000 | | |
| | | <u>95 000</u> | |
| General and administration | | | |
| Depreciation on buildings | 12 600 | | |
| Depreciation on plant and equipment | 12 500 | | |
| Office salaries | 96 000 | | |
| Insurance expense | 7 000 | | |
| General expenses | 10 000 | | |
| Office operational expenses | 16 400 | | |
| | | <u>154 500</u> | |
| Financial | | | |
| Interest expense | 16 200 | | |
| | | <u>16 200</u> | |
| Total Other Expenses | | | <u>265 700</u> |
| Profit before income tax | | | 101 940 |
| Less income tax expense | | | <u>30 312</u> |
| Profit after income tax | | | <u><u>71 628</u></u> |

Additional information

- Plant and Equipment was sold for cash during the year. The original cost was \$52 000.
- All additional non-current assets purchased were paid for in cash.
- Dividends declared were paid in cash during the current year.
- Land was revalued by \$50 000 during the current financial year.
- Debentures were issued for cash during the current financial year.

Required

- (a) Prepare the Schedule of Cash Payments to Suppliers and Employees.
- (b) Prepare the Statement of Cash Flows for the year ended 30 June 2024 for Harper Manufacturing.



17. Dumpster Chemicals Ltd is a manufacturing company. Below is their unadjusted trial balance for the year ended 30 June 2029.

Dumpster Chemicals
Trial Balance as at 30 June 2029

| Account | \$ | \$ |
|--|------------------|------------------|
| Land – at fair value | 1 200 000 | |
| Buildings – at cost | 850 000 | |
| Less: Accumulated depreciation | | 280 000 |
| Plant & Machinery – at cost | 950 000 | |
| Less: Accumulated depreciation | | 350 000 |
| Receivables | 75 000 | |
| Less: Allowance for doubtful debts | | 1 500 |
| Inventories | 37 000 | |
| Shares held in a public company | 60 000 | |
| Final dividend declared | 45 000 | |
| Interim dividend declared | 30 000 | |
| General Reserve | | 180 000 |
| Asset Revaluation Reserve | | 190 000 |
| Retained Earnings | 59 000 | |
| Proceeds on sale of shares in public company | | 70 000 |
| Prepaid Insurance | 23 000 | |
| Bank overdraft | | 87 000 |
| Insurance expense | 2 000 | |
| Bad debts | 700 | |
| Sales Wages | 36 000 | |
| Share capital – \$1.00 paid up | | 1 250 000 |
| Share Issue Costs | 45 000 | |
| Dividend income | | 10 000 |
| Other Selling & Distribution expense | 189 000 | |
| Mortgage – Monthly repayments: \$12000 | | 750 000 |
| Proceeds on sale of plant & machinery | | 11 000 |
| Patents & Copyrights | 250 000 | |
| Trade creditors | | 82 000 |
| Unearned rental income | | 15 000 |
| Rental income | | 22 500 |
| Other General & Administration expenses | 123 000 | |
| Interest expense | 15 000 | |
| Sales | | 896 700 |
| Cost of sales | 206 000 | |
| | 4 195 700 | 4 195 700 |

Additional information:

The final balance day adjustments that must be entered before the final financial reports can be presented to the directors and shareholders at the upcoming Annual General Meeting are listed below:

- An additional bad debt of \$900 due from XYZ Ltd must be written off.
- The allowance for doubtful debts is to be set at 2.70% of debtors.
- Depreciation has not been calculated for the year:
- Buildings have an estimated useful life of 20 years and should have a residual value of 15% of their original cost.
- Plant and machinery is to be depreciated using the reducing balance method / diminishing value method at the rate of 22% p.a.
- The cash proceeds for an item of Plant and Machinery that was sold on the last day of the financial year were also banked on the same day. The original cost was \$45 000 and at the end of the year its written down value was \$28 500.
- The wages for sales staff owing at balance date is \$3 500.
- Prepaid insurance expired / consumed at balance date is \$19 000.
- The monthly rental income earned from the sub-letting of surplus floor space is \$2 500. It has been sub-let to the same tenants for the last three years, who always pay their rent three months in advance.

The directors of Dumpster made the following resolutions at the end of the financial year:

- Resolved to transfer \$75 000 to Retained Earnings from General Reserve.
- Resolved to revalue land to a value of \$1 400 000, following a valuation by a Real Estate Valuer.
- Resolved to recommend to shareholders a final dividend of 4 cents per share.

Required:

- (a) Prepare a Statement of Comprehensive Income for the year ended 30 June 2029.
- (a) Prepare a Statement of Changes in Equity for the year ended 30 June 2029.

18. Below are the extracts from the financial statements of Blue Tech Inc. for the year ended December 31, 2022:

Balance Sheet as at December 31, 2022

| | 2022 | 2021 |
|-------------------------------|-------------|-------------|
| Total Assets | \$5,600,000 | \$4,800,000 |
| Current liabilities | | |
| Borrowings (bank overdraft) | \$15,000 | \$0 |
| Accounts payable | \$120,000 | \$90,000 |
| Income tax payable | \$80,000 | \$60,000 |
| Lease liabilities | \$30,000 | \$35,000 |
| Accrued interest expense | \$5,000 | \$8,000 |
| Total current liabilities | \$250,000 | \$193,000 |
| Non-current liabilities | | |
| Borrowings | \$200,000 | \$150,000 |
| Lease liabilities | \$90,000 | \$100,000 |
| Total non-current liabilities | \$290,000 | \$250,000 |
| Total liabilities | \$540,000 | \$443,000 |
| Net assets | \$5,060,000 | \$4,357,000 |
| Shareholders' equity | | |
| Share capital | \$3,500,000 | \$3,000,000 |
| Reserves | \$500,000 | \$400,000 |
| Retained earnings | \$1,060,000 | \$957,000 |
| Total equity | \$5,060,000 | \$4,357,000 |

Additional Information:

- BlueTech Inc. paid its 2021 income tax liability in April 2021. The company tax rate is 30%.
- The company issued \$500,000 additional common shares on April 1, 2022, at a price of \$2 per share.
- The number of shares issued at December 31, 2021, was 1,500,000.
- BlueTech Inc. classifies interest and dividends received and paid as financing activities.

Income Statement for the Year Ended December 31, 2022

| | 2022 | 2021 |
|---------------------------------|-------------|-------------|
| Sales (all on credit) | \$3,200,000 | \$2,800,000 |
| Less: Cost of sales | \$1,800,000 | \$1,600,000 |
| Gross Profit | \$1,400,000 | \$1,200,000 |
| Total operating income | \$5,000 | \$10,000 |
| Other income – interest revenue | 1,405,000 | \$1,210,000 |
| Less expenses | | |
| Interest | \$60,000 | \$50,000 |
| Other | \$400,000 | \$380,000 |
| Total expenses | \$460,000 | \$430,000 |
| Operating profit before tax | \$945,000 | \$780,000 |

Required:

- (a) Prepare the financing activities section of the statement of cash flows for Blue Tech Inc. for the year ended December 31, 2022.

19. The following information has been taken from the accounts of Harper Little Co for the year ending 30 June 2024.

Harper Little Co
Account balances as at 30 June 2024

| | Debit \$ | Credit \$ |
|--|-----------|-----------|
| Land | 650,000 | |
| Plant and Equipment | 368,500 | |
| Inventory | 149,800 | |
| Bad debts | 200 | |
| Prepaid insurance | 4,750 | |
| Wages | 175,470 | |
| Freight inwards | 1,000 | |
| Discount received | | 4,000 |
| Discount allowed | 760 | |
| Cost of sales | 204,000 | |
| Accounts payable | | 555,570 |
| Accounts receivable | 85,300 | |
| Buildings | 258,000 | |
| Cash at bank | 40,850 | |
| Debentures (due on 30 June 2024) | | 300,000 |
| Accumulated depreciation – Buildings | | 6,700 |
| Accumulated depreciation – Plant and Equipment | | 24,000 |
| Allowance for doubtful debts | | 650 |
| Unearned rental income | | 18,000 |
| Sales | | 690,000 |
| Sales returns and allowances | 4,000 | |
| Final dividend paid | 11,200 | |
| Investments (maturity date 1 February 2026) | 122,900 | |
| Interest received from investments | | 2,450 |
| Ordinary share capital | | 560,000 |
| Other expenses | 208,440 | |
| Retained earnings (1 July 2023) | | 123,800 |
| | 2,285,170 | 2,285,170 |

Additional information on 30 June 2024:

- The Prepaid Insurance was paid on 1 February 2024 for 12 months
- Accrued Wages at 30 June is \$1,500
- Accrued Interest on investments is \$500
- Depreciation on Buildings is calculated at 20% on cost
- Depreciation on Plant and Equipment is calculated at 20% reducing balance
- Additional Bad Debts of \$200 are to be recognised
- The Allowance for Doubtful Debts is to be set at \$800
- By balance day, Rental Income earned amounted to \$15,000



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

Financial systems and fundamental principles

- characteristics of public and large proprietary companies
 - liability of owners
 - number of members and directors
 - continuity of existence
 - legal entity
 - transferability of ownership
 - separation of ownership and management

Recording, processing and communicating financial information

- preparation of the general journal and general ledger for the following:
 - issue of ordinary shares payable in full on application
 - bonus share issues
 - interim and final dividends (recommended, declared or paid)
 - share issue costs
- preparation of the retained earnings ledger account, including:
 - profit or loss
 - dividends
 - transfers to and from reserve accounts
 - debit or credit opening balances

- preparation of financial statements in accordance with the *Conceptual Framework* and in accordance with the standards
 - statement of comprehensive income (one statement version only)
 - statement of financial position
 - statement of changes in equity
 - retained earnings
 - equity
 - share capital
 - reserves
- notes to financial statements/notes to accounts, limited only to:
 - share capital
 - other components of equity
 - property, plant and equipment
 - dividends

Note: preparation of the above financial statements is restricted to the following issues:

- revaluation of property, plant and equipment: non-depreciable assets only
- cash dividends
- bonus share issues
- transfers to or from general reserve
- preliminary expenses
- issue of ordinary shares, including share issue costs
- purpose and nature of the following balance day adjustments:
 - accrued expenses
 - prepaid expenses/stock of supplies
 - accrued income
 - income in advance
 - doubtful debts
 - depreciation
- for the purpose of calculating income tax expense, profit before tax is deemed to equal taxable income

Evaluating financial information for planning, coordinating, controlling and investing

- examination and interpretation of annual reports, financial statements and stock exchange data to assess the position and performance of a public company
- purpose of annual reporting and the use of key performance indicators by directors for accountability and decision-making purposes

The role and influence of governments and other bodies

- the purpose and nature of the *Corporations Act 2001*, and its impact on company formation and operations
 - powers and duties of directors
 - a written constitution
 - replaceable rules
 - prospectus
 - rights of shareholders

The influence of social, environmental and ethical factors

- the extent and nature of corporate social disclosure
- the difficulties faced by accountants in producing social and environmental information
- the use made of corporate social disclosure by the company and other users
- critical evaluation of corporate social disclosure as made by Australian companies

7.1 CHARACTERISTICS OF PUBLIC AND LARGE PROPRIETARY COMPANIES

| Small Proprietary Companies | Large Proprietary Company | Public Companies |
|---|---|---|
| <ul style="list-style-type: none"> Separate legal entity (e.g. limited liability and continuity of existence) without the need to provide for large fund-raising. Low legislative interference. Pty Ltd in name. No more than 50 non-employee shareholders. Not able to invite subscriptions from the public. Financial statements only need to be audited or lodged with ASIC if specifically requested. Issue of securities only from existing shareholders and employees. At least one director who resides in Australia. Fewer than 50 employees. The consolidated revenue of the company for the financial year must be less than \$25 million. The value of the consolidated gross assets at the end of the financial year must be less than \$12.5 million. | <p>If a proprietary company exceeds any two of these:</p> <ul style="list-style-type: none"> Fewer than 50 employees The consolidated revenue of the company for the financial year must be less than \$25 million The value of the consolidated gross assets at the end of the financial year must be less than \$12.5 million <p>then it is classified as a large proprietary company.</p> <p>Large proprietary companies:</p> <ul style="list-style-type: none"> Liability is limited to unpaid amounts owing on shares. Must have at least one director. A minimum of one and a maximum of 50 non-employee shareholders/members. Can sell shares in accordance with the conditions contained in the Constitution. Must prepare financial reports, have them audited and lodge them with ASIC. Cannot raise capital from the general public. Must produce a Director's report, which must be sent to all shareholders and lodged with ASIC. | <ul style="list-style-type: none"> Liability is limited to unpaid amounts owing on shares. Must have at least 3 directors, at least two must live in Australia. A minimum of one and no maximum of shareholders/members. Can sell shares without restriction. Hold an AGM. Maintain financial and other records as specified in the <i>Corporations Act 2001</i>, including compliance with Australian Accounting Standards. Can raise capital from the general public. Constitution lodged with ASIC along with any changes. Produce audited financial reports and a Directors' Report which must be sent to all shareholders and lodged with ASIC. If listed on ASX must comply with the additional disclosure requirements of the ASX. |

The purpose and nature of the *Corporations Act 2001*, and its impact on company formation and operations

Disclosure documents

Public companies that wish to offer shares to the public must produce one of the following:

- Prospectus:** overview of the company, detailed information about the proposed issue of securities.
- Offer Information Statement:** used when the company is issuing securities to a value less than \$10 million. It must include an audited financial statement from the previous six months.
- Profile statement:** basic requirements. It has to be approved by ASIC and contains limited information – rarely used.

Powers of directors

1. General duties:

- the duty to exercise powers and duties with the care and diligence that a reasonable person would have
- the duty to exercise powers and duties in good faith in the best interests of the company
- the duty not to improperly use position to gain an advantage
- the duty not to improperly use information obtained through position.

2. Duty to not trade while insolvent

- A company is insolvent if it is unable to pay all its debts when they are due.

3. Duty to keep books and records

- Company must keep adequate financial records to correctly record and explain transactions and the company's financial position and performance. A failure of a director to take all reasonable steps to ensure a company fulfils this requirement contravenes the *Corporations Act*.

Written constitution

The constitution is a set of rules for the internal management of the company. The constitution can be used to modify or replace completely the replaceable rules contained in the *Corporations Act*.

The constitution covers:

- rights of shareholders
- powers of directors
- voting procedures at meetings of shareholders or directors.

Replaceable rules

The *Corporations Act* contains a set of rules, known as replaceable rules, which govern the internal management of a company. A company can choose to have its own constitution, use the replaceable rules or use a combination of its own constitution and one or more of the replaceable rules.

The replaceable rules cover:

- powers of directors
- remuneration of directors
- voting procedures at meetings of shareholders or directors
- the calling of directors' meetings.

Rights of shareholders

1. Ordinary shareholders

- Hold the most common type of shares
- No specific rights to any dividends
- Voting rights at shareholders' meetings
- Last to receive payment if liquidation occurs.

2. Preference shareholders

- Dividend at a fixed rate *before* ordinary shareholders
- Constitution may allow repayment of capital before ordinary shareholders if liquidation occurs
- No assumed right to attend and vote at AGM of shareholders.

Shares

- Participating Preference shares – 'hybrid' security, with features of both debt and equity. A preference share pays a regular defined income stream, and generally has a fixed maturity date.
- Cumulative preference shares – entitled to receive missed dividend payment when a dividend is next declared. Receive priority over the claims of ordinary shareholders.
- Non cumulative preference shares – does not pay the holder any unpaid dividends.
- Redeemable preference shares – may be redeemed by the company at a later date, either by payment out of profits which would otherwise be available for dividends or out of proceeds of a issue of shares.

Dividends

Paid on ordinary and preference shares. Can be a number of cents per share or a percentage of capital.

Interim dividend – declared by Directors and paid to members during the period.

Final dividend – recommended by Directors and declared and paid at AGM.

The influence of social, environmental and ethical factors

Corporate Social Disclosure is different to mandatory corporate disclosure. The reporting responsibilities of a company have traditionally been in the area of accountability for financial performance, but all business activity has social and environmental costs and benefits. This is about the success or otherwise of the company efforts to contribute to economic development while improving the qualitative elements.

Sustainability reporting involves companies demonstrating their corporate responsibility through measuring and publicly reporting on their economic, social and environmental performance and impacts. It can be delivered through the company's annual report, a stand alone sustainability report, a triple bottom line report or an environmental or social impact report.

Reasons for a company to produce a CSD report:

- management of business risk
- employee relations
- ethics
- public reputation
- competitive advantage.

Challenges to a company:

- Australian Accounting Standards are focused on the measurement of financial information and do not make provision for triple bottom line
- No specific requirements
- Lack of clear guidelines resulting in a wide range of reporting methods
- Difficulty of verifying the information
- Requires the investment of resources and training of staff.

Evaluating Financial Information

Financial information such as **Annual reports**, **Financial statements** and **Stock exchange data** assists external business stakeholders in making improved decisions about their investment in a public company. They provide information about the financial position and performance, and the business strategies of the company.

Purpose of annual reporting: Provides a point in time for a review of results by managers, enables forward planning by company directors, and gives information for investment decisions to be made by external stakeholders.

Key performance indicators: These are targets, usually set by the Board of the company, that are used to keep directors of the company accountable for results. They also assist in the review of performance and decision making.

Issue of ordinary shares payable in full on application

STEP ONE: Application money received.

| DATE | DETAILS | DEBIT | CREDIT |
|------|--|-------|--------|
| | Share Trust Fund Application <i>Receipt of application money for (Number and amount of shares)</i> | | |

STEP TWO: Allotment of shares – transfer cash.

| DATE | DETAILS | DEBIT | CREDIT |
|------|---|-------|--------|
| | Cash at bank Share Trust Fund <i>Transfer of application money into cash at bank.</i> | | |

STEP THREE: Allotment of shares - transfer application.

| DATE | DETAILS | DEBIT | CREDIT |
|------|--|-------|--------|
| | Application Share capital <i>Transfer from application into capital.</i> | | |

Bonus share issues

| DATE | DETAILS | DEBIT | CREDIT |
|------|--|-------|--------|
| | General reserve Share capital <i>Bonus share issue from reserves</i> | | |

Interim and final dividends (recommended, declared or paid)

Declaration of dividend.

| DATE | DETAILS | DEBIT | CREDIT |
|------|---|-------|--------|
| | General reserve Dividend payable - Final <i>Declaration of dividend on (Number and type of share)</i> | | |

Payment of dividend.

| DATE | DETAILS | DEBIT | CREDIT |
|------|--|-------|--------|
| | Dividend payable - Final/Interim Cash at bank <i>Payment of dividend on (Number and type of share)</i> | | |

Share issue costs

These are a deduction from equity not an expense.

| DATE | DETAILS | DEBIT | CREDIT |
|------|-------------------------------------|-------|--------|
| | Share capital | | |
| | Cash at bank | | |
| | <i>Payment of share issue costs</i> | | |

Retained Earnings

Information in the ledger account:

| ENTRY | MEANING |
|---------------------------------------|---|
| Profit or loss | Profit is Credited Loss is Debited |
| Dividends | Debited |
| Transfers to or from reserve accounts | To is Debited From is Credited |
| Debit or credit opening balances | Positive balance is Credit Negative balance is Debit |

Statement of Changes in Equity

Income and expense amounts that Australian Accounting Standards do not define as income and expense for reporting in the Statement of Comprehensive Income.

Directly affect equity:

- gains or losses on the revaluation of assets,
- gains or losses on investments for sale,
- changes in the fair value of specific items.

Statement of Changes in Equity

| | \$ |
|--|------------|
| Profit for the period | XXX |
| Total recognised income and expense for the period | <u>XXX</u> |
| Share capital | |
| Ordinary | |
| Share capital at 1 July 20XX | XXX |
| Issue of share capital | XXX |
| Share capital at 30 June 20YY | <u>XXX</u> |
| Preference | |
| Share capital at 1 July 20XX | XXX |
| Share capital at 30 June 20YY | XXX |
| Other reserves | |
| Asset revaluation | |
| Asset revaluation reserve at 1 July 20XX | XXX |
| Transfer | XXX |
| Asset revaluation reserve at 30 June 20YY | <u>XXX</u> |
| Retained earnings | |
| Retained earnings at 1 July 20XX | XXX |
| ADD: | |
| Total profit recognised for period | XXX |
| Transfer | XXX |
| | <u>XXX</u> |
| LESS: | |
| Dividend – Ordinary | XXX |
| Dividend – Preference | XXX |
| Transfer | XXX |
| Retained earnings at 30 June 20YY | <u>XXX</u> |

Notes to the Accounts

These contain information in addition to that contained in the financial statements.

- **Share capital note:** information about the number of shares and changes in each class of share capital.
- **Other components of equity:** such as shares not fully paid or reserved for issue.
- **Property, plant and equipment:** changes that have occurred in the different types of assets in the company.
- **Dividends:** details of all recognised and unrecognised dividends.

Examples of the notes to the accounts are included in Chapter 6.

TEST YOUR KNOWLEDGE

CHAPTER 7: COMPANIES

1. Create a summary table which compares public and large proprietary companies on the following parameters:
 - (a) liability of owners
 - (b) number of members and directors
 - (c) continuity of existence
 - (d) legal entity
 - (e) transferability of ownership
 - (f) separation of ownership and management.

2. Complete the entries required in the general journal and general ledger for this company.

Mandurah Boats Ltd offered 400 000 fully paid \$4.50 ordinary shares to the public on 30 September 2025. The share issue was fully subscribed by the end of the month. Shares were allotted ten days later, and \$400 000 of expenses were paid. ASX listing occurred on the 1 November 2025 and shares traded at \$6 per share. At the end of the financial year, the directors declared and paid a 3% dividend and the AGM agreed to a 2:100 bonus share issue.

3. Explain the differences between four different dividend types.

4. Define 'equity' and explain the purpose of the Statement of Changes in Equity.

5. Complete a Retained Earnings ledger account which illustrates the following transactions for a company:

- Payment of a 5% dividend on 400 000 \$6 shares
- Profit for the period of \$560 000
- Transfer to the Asset Revaluation Reserve of \$20 000
- Transfer from the General Reserve of \$90 000
- An opening debit balance of \$12 000
- Explain the meaning of the final balance in this account.

6. Prepare a Statement of Changes in Equity for the company Karratha Cranes Ltd from this information.
- The company has 600 000 fully paid \$4.00 ordinary shares and 300 000 fully paid \$8.00 5% preference shares.
 - During the year ending 30 June 2031, a 1 for 100 bonus share issue was made from the revaluation reserve.

Account balances as at 30 June 2030:

| | |
|-------------------------------|------------|
| Income tax | \$ 110 000 |
| Profit before tax | 140 000 |
| General reserve | 400 000 |
| Revaluation reserve | 550 000 |
| Interim dividend – ordinary | 60 000 |
| Interim dividend – preference | 60 000 |

7. From the following Trial Balance and additional information, prepare:
- A Statement of Changes in Equity
 - A Statement of Financial Position
 - The Share Capital, Dividends and Property, Plant and Equipment notes to the accounts.

| | DEBIT 000's | CREDIT 000's |
|--|----------------|-----------------|
| Trial Balance | | |
| Cash at Bank | 600 | |
| Accounts payable | | 700 |
| Accounts receivable | 480 | |
| Overdraft | | 89 |
| Prepaid assets | 450 | |
| Accrued wages | | 290 |
| Dividends | 900 | |
| Interim dividend ordinary | 650 | |
| Interim dividend preference | 250 | |
| Plant and equipment | 3 900 | |
| Accumulated depreciation plant and equipment | | 2 806 |
| Office building | 5 000 | |
| Accumulated depreciation office | | 4 000 |
| Vehicles | 600 | |
| Accumulated depreciation vehicles | | 330 |
| Property | 28 000 | |
| Loan | | 12 090 |
| Dividends | 300 | |
| Current tax liability | | 2 600 |
| Revaluation reserve | | 1 590 |
| General reserve | | 13 345 |
| Ordinary share capital | | 2 700 |
| 4% preference share capital | | 1 500 |
| Retained earnings | 2 250 | |
| After tax profit (Loss) | | 1 340 |
| | 43 080 | 43 080 |

Additional information:

The ordinary shares were originally issued at a value of \$3 each, and the preference shares at \$5 each. No shares were issued during the year.

During the financial year the following occurred:

- Authorisation of the final dividend declared at the AGM from retained earnings.
- The transfer of \$7 800 000 from the general reserve to retained earnings.
- Property was revalued upwards by \$90 000.
- Gains of \$55 000 were made on available for sale – financial assets and a \$9 000 exchange difference on translating foreign currencies.

On the Balance Day the following occurred:

- A final preference dividend in full
- A final dividend of 5% for ordinary shareholders.

8. What is the purpose of the *Corporations Act*?

9. Create a summary table comparing the role of the Corporations Act in overseeing each of the following:

- powers and duties of directors
- a written constitution
- replaceable rules
- prospectus
- rights of shareholders.

10. Define “Corporate Social Disclosure” and explain its costs and benefits.

11. Outline two criticisms of the use of CSD by Australian companies.

12. How can annual reports, financial statements and securities exchange data be used to assess the position and performance of a public company?

13. What is a Key Performance Indicator and how are they used by the Directors of a company?

14. Garland Industries is a party supplies business. An extract of the business Trial Balance as at 1 July 2023 is shown below:

Garland Industries
Trial Balance (extract) as at 1 July 2023

| Ledger Account | Debit | Credit |
|--|-------------|-------------|
| Share Capital (2,000,000 ordinary \$1 shares less share issue costs) | | \$1 985 000 |
| Retained Earnings | | \$182 000 |
| Asset Revaluation Reserve | | \$50 000 |
| General Reserve | | \$185 000 |
| Land and Buildings | \$1 200 000 | |
| Cash at Bank | \$145 000 | |

The following transactions occurred for Garland Industries during the period 1 July 2023 to 30 June 2024.

| Date | Details |
|------------------|--|
| 4 October 2023 | The final dividend of \$0.04 per share was paid. |
| 30 November 2023 | The company issued a prospectus for 100 000 new ordinary share at the price of \$1.50 per share. |
| 31 December 2023 | The share issue closed fully subscribed and paid. |
| 6 January 2024 | The directors resolved that the new ordinary shares be allotted. |
| 7 January 2024 | The share issue costs of \$15 000 were paid and written off |
| 1 April 2024 | The directors decided to transfer \$30 000 from the General Reserve to the Retained Earnings account |
| 21 April 2024 | The directors resolved to issue ordinary shares from the General Reserve at the rate of 1 share per 30 ordinary shares issued at \$1.50 per share. |
| 30 June 2024 | Garden Care Limited reported a profit before tax of \$90 000 (assume a 30% tax rate). |
| 30 June 2024 | The Land and Buildings were re-valued to \$1 250 000 |
| 30 June 2024 | The directors recommended a final dividend of \$0.05 per ordinary share issued |

Required:

- (a) Prepare the general journal entries for the following:
 - final dividend paid
 - new share issue including payment of share issue costs
 - bonus share issue
- (b) Post the journal transactions to the ledgers and balance the Share Capital Account as at 30 June 2024.

15. Multiple Choice. Select the **most correct** answer.

- (i) A disadvantage of the company form of business, when compared to a business that is not incorporated, would be:
 - a. Liability limited to the unpaid share amount
 - b. Being able to sell shares without restriction
 - c. Being able to raise capital from the public
 - d. Requirements to have financial reports lodged with ASIC
- (ii) Dividends can only be paid if:
 - a. There is enough profit
 - b. They have been declared or recommended by the Directors
 - c. The company Replaceable Rules states they are approved
 - d. Shareholders have given their agreement at an AGM
- (iii) Which of the following rights is not assumed to be held by preference shareholders:
 - a. To receive a dividend at a fixed rate
 - b. Payment of dividend before ordinary shareholders
 - c. Repayment of capital before ordinary shareholders are provided for
 - d. To vote at the company AGM
- (iv) Which of the following would not be included in the share capital note to the accounts?
 - a. Number of preference shares held
 - b. Number of ordinary shares issued
 - c. Amount of dividends recognised
 - d. Different classes of share capital

16. The owners of the company Pyro have provided the following information.

**Pyro Account Balances for Equity
at 30 June 2023**

| | |
|--|-------------|
| Share Capital 800,000 ordinary shares of \$1 each less share issue costs of \$14,500 | \$785,500 |
| Retained Earnings | (\$149,000) |
| General Reserve | \$58,000 |
| Asset Revaluation Reserve | \$360,000 |

**Pyro
Trial Balance
as at 30 June 2024**

| | Debit | Credit |
|--|-------------|-------------|
| Cash at bank | \$30,800 | |
| Cash on hand | \$14,000 | |
| Short term deposit | \$89,600 | |
| Inventory | \$93,800 | |
| Accounts receivable | \$63,000 | |
| Allowance for doubtful debts | | \$3,080 |
| Accounts payable | | \$232,400 |
| Accrued interest income | \$784 | |
| Debenture interest payable | | \$1,537 |
| Prepaid insurance | \$46,200 | |
| Asset revaluation reserve | | \$560,000 |
| Ordinary share capital | | \$1,460,500 |
| Investments in other companies | \$1,498,500 | |
| Retained earnings | | \$315,000 |
| Current tax liability | | \$234,000 |
| General reserve | | \$98,000 |
| Debentures (payable in 2028) | | \$811,666 |
| Land | \$1,260,000 | |
| Buildings | \$420,000 | |
| Plant and equipment | \$336,000 | |
| Accumulated depreciation – Plant and equipment | | \$136,500 |
| | \$3,852,684 | \$3,852,684 |

17. Using the financial statements provided prepare a Statement of Cash Flows for the company Davis.

Davis Inc
Statement of Financial Position
as at June 30

| Assets | 2020 | 2019 |
|----------------------------------|------------------|------------------|
| | \$ | \$ |
| Cash | 4,900 | 15,000 |
| Petty Cash | 1,500 | 1,200 |
| Accounts Receivable | 42,500 | 39,000 |
| Inventory | 103,000 | 95,000 |
| Investments | 50,000 | 50,000 |
| Prepaid Insurance | 600 | 500 |
| Land (at cost) | 320,000 | 320,000 |
| Buildings (at cost) | 265,000 | 265,000 |
| Less accumulated depreciation | (39,600) | (27,000) |
| Plant and Equipment | 89,000 | 67,000 |
| Less accumulated depreciation | (23,000) | (46,000) |
| Intangible asset (Goodwill) | 11,500 | 11,500 |
| Total Assets | \$825,400 | \$791,200 |
| Liabilities | | |
| Accounts Payable | 34,400 | 25,700 |
| Accrued Office Salaries | 1,800 | 1,600 |
| Current Income Tax Liability | 30,312 | 23,100 |
| Mortgage Payable (due July 2021) | 121,888 | 220,200 |
| Debentures | 85,000 | 0 |
| Total Liabilities | 273,400 | 270,600 |
| Net Assets | \$552,000 | \$520,600 |
| Equity | | |
| Share Capital | 430,000 | 430,000 |
| General Reserve | 85,000 | 65,000 |
| Retained Earnings | 37,000 | 25,600 |
| Total Equity | \$552,000 | \$520,600 |

Davis Inc
Income Statement
for the year ended 30 June 2020

| Income | \$ | \$ | \$ |
|-------------------------------------|--------|---------|---------|
| Cash Sales | | 156,000 | |
| Credit Sales | | 325,000 | 481,000 |
| Less Cost of Sales | | | 130,000 |
| Gross Profit | | | 351,000 |
| Add Other Income | | | |
| Interest Revenue | | 2,680 | |
| Gain on Sale of Plant and Equipment | | 9,750 | |
| Dividends Income | | 4,210 | 16,640 |
| | | | 367,640 |
| Less Other Expenses | | | |
| Selling and Distribution | | | |
| Marketing Expenses | 11,000 | | |
| Sales Salaries | 63,000 | | |
| Retail Store Expenses | 21,000 | 95,000 | |
| General and Administration | | | |
| Depreciation on Buildings | 12,600 | | |
| Depreciation on Plant and Equipment | 12,500 | | |
| Office Salaries | 96,000 | | |
| Insurance Expense | 7,000 | | |
| General Expenses | 10,000 | | |
| Office Operational Expenses | 16,400 | 154,500 | |
| Financial | | | |
| Interest Expense | 16,200 | 16,200 | 265,700 |
| Profit before Income Tax | | | 101,940 |
| Less Income Tax Expense | | | 30,312 |
| Profit after tax | | | 71,628 |

Additional Information;

- Plant and Equipment was sold for cash during the year. The original cost was \$52,000.
- All additional non-current assets purchased were paid for in cash.
- Dividends declared were paid in cash during the current year.
- Debentures were issued for cash during the current financial year.



SYLLABUS CHECKPOINT

On completion of this chapter you will have covered:

Recording, using and evaluating financial information

- preparation of the following ratios – application of GST **not** required
 - liquidity ratios
 - working capital/current
 - quick asset
 - efficiency ratios
 - debtor's collection
 - inventory/stock turnover
 - profitability ratios
 - profit
 - rate of return on assets
 - times interest earned
 - leverage ratio
 - debt to equity
 - market ratios
 - earnings per share
 - price/earnings
 - dividend yield

Evaluating financial information for planning, coordinating, controlling and investing

- interpretation of the following ratios:
 - liquidity ratios
 - working capital/current
 - quick asset

- efficiency ratios
 - debtor's collection
 - inventory/stock turnover
- profitability ratios
 - profit
 - rate of return on assets
 - times interest earned
- leverage ratio
 - debt to equity
- market ratios
 - earnings per share
 - price/earnings
 - dividend yield
- limitations in assessing performance from financial statement analysis and from traditional financial accounting
 - historical cost accounting
 - lack of comparability between entities
 - lack of disclosure

8.1 PROFITABILITY AND STABILITY

The purpose of ratios is to evaluate profitability, liquidity and leverage:

Profitability

The business's ability to generate a return from its investment in assets or equity, involves comparing some measure of profit made with the assets or owners equity of the business.

Liquidity

The ability of the business to pay all debts on the date they fall due. This requires a comparison of current assets with current liabilities.

Leverage

This is a comparison of the internally generated debt (owner's equity) of the business with the externally owed debt (liabilities). Liabilities are usually due to be paid on a specific date and have other requirements such as interest payments tied to them. If a business is highly geared, then it has a high proportion of externally generated debt. A business with low gearing has a low proportion of internally generated debt.

Efficiency

This is the effectiveness of the business in managing costs and income.

Market Ratios

These provide information to investors and other external stakeholders on the return that the business is providing.

Preparation and interpretation of ratios

The following tables summarise the calculation of each ratio and how to interpret a general increase or decrease in that ratio.

Liquidity ratios

| WORKING CAPITAL RATIO/ CURRENT RATIO | |
|---|--|
| = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$ | |
| INCREASING | DECREASING |
| Movement toward a ratio of 2.0:1.0 or 200% recommended. Current assets are increasing in comparison to current liabilities. Idle cash can be invested. There may be slower stock sales or debtor receipts. | Current assets decreasing compared to current liabilities. There may be increased creditors or short term borrowings. |

| QUICK ASSET RATIO | |
|---|---|
| = $\frac{\text{Current assets (not including stock and prepayments)}}{\text{Current liabilities (not including overdrafts)}}$ | |
| INCREASING | DECREASING |
| If ratio is above 1.0:1.0 or 100% all short term debt can be paid. Debtors could have increased or creditors lowered. Other current assets such as cash may have increased. | If below 100% short term debt might not be able to be paid. Debtors could have lowered or creditors increased. |

Examples of liquidity ratio calculations

From this information extracted from an Income Statement and Balance Sheet, liquidity ratios can be calculated as follows.

| | |
|------------------------|-----------|
| Cash | \$ 20 000 |
| Debtors | 32 000 |
| Inventory | 45 000 |
| Prepaid advertising | 21 000 |
| Furniture and fittings | 96 000 |
| Office equipment | 83 000 |
| Overdraft | 4 000 |
| Creditors | 54 000 |
| Mortgage | 130 000 |

$$\begin{aligned}
 \text{Working capital} &= \frac{20\,000 + 32\,000 + 45\,000 + 21\,000}{4\,000 + 54\,000} \\
 &= \frac{118\,000}{58\,000} \\
 &= 203\% \text{ or } 2.03:1.0
 \end{aligned}$$

$$\begin{aligned}
 \text{Quick asset ratio} &= \frac{20\,000 + 32\,000}{54\,000} \\
 &= \frac{52\,000}{54\,000} \\
 &= 96\% \text{ or } 0.96: 1.0
 \end{aligned}$$

Efficiency ratios

| DEBTOR'S COLLECTION | |
|--|--|
| $= \frac{\text{Average Accounts Receivable}}{\text{Credit Sales}} \times 365$ | |
| INCREASING | DECREASING |
| Debtors taking longer to pay Review debt collection processes Encourage faster payment of accounts receivable. | Debtors are paying more quickly Managing accounts better Sales may have increased. |

| INVENTORY/STOCK TURNOVER | |
|--|--|
| $\text{Turnover for period} = \frac{\text{Cost of Sales}}{\text{Cost of Average Inventory}} = \text{x times per period}$ | |
| $\text{Stock collection period} = \frac{365}{\text{Turnover for period}} = \text{x days per annum}$ | |
| INCREASING | DECREASING |
| Inventory being sold more quickly Managing inventory better Less out of date stock Don't want it too high because of restocking issues. | Inventory being sold more slowly Need to improve sales Stock may be out of date Cash flow might be lower. |

Examples of efficiency ratio calculations

From the above information extracted from an Income Statement and Balance Sheet, efficiency ratios can be calculated as follows.

Balances at 30 June 2025

| | |
|---------------------|------------|
| Cash | \$ 200 000 |
| Accounts Receivable | 52 000 |
| Cash Sales | 145 000 |
| Credit Sales | 221 000 |
| Inventory | 96 000 |
| Cost of Sales | 183 000 |

Balances at 30 June 2024:

| | |
|---------------------|---------|
| Accounts Receivable | 42 000 |
| Inventory | 106 000 |

$$\begin{aligned} \text{Debtor's collection} &= \frac{(52\,000 + 42\,000)/2}{221\,000} \times 365 \\ &= 39 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Stock turnover} &= \frac{183\,000}{(96\,000 + 106\,000)/2} \\ &= 3.6 \text{ times per year} \\ &= 101 \text{ days} \end{aligned}$$

Profitability ratios

| PROFIT RATIO | |
|---|--|
| $\frac{\text{Profit}}{\text{Fees/Sales}}$ | |
| INCREASING | DECREASING |
| Profit has increased in comparison to sales. Could be a decrease in expenses. More high profit stock may have been sold, or more income received. | Profit has decreased in comparison to sales. Could be an increase in expenses. More low profit stock may have been sold, or less income received from other sources. |

| RATE OF RETURN ON ASSETS | |
|--|---|
| $\frac{\text{Profit}}{\text{Average Assets}}$ | |
| INCREASING | DECREASING |
| Profit has increased in comparison to assets. The business is using assets more efficiently, to generate a better return. | Profit has decreased in comparison to assets. The business is using assets less efficiently, to generate a reduced return. |

| TIMES INTEREST EARNED | |
|---|--------------------------------------|
| $\frac{\text{Profit (before income tax) + interest expense}}{\text{Interest costs expensed and capitalised}}$ | |
| INCREASING | DECREASING |
| More able to cover interest Leverage might be low If too high, consider investment. | Less able to make interest payments. |

Examples of profitability ratio calculations

From this simplified Income Statement and Balance Sheet information, profitability ratios can be calculated as follows.

| | |
|--------------------------|-----------------|
| Sales | \$129 000 |
| Less: Cost of Sales | <u>57 000</u> |
| GROSS PROFIT | 72 000 |
| Less: Expenses | |
| Selling and distribution | 27 000 |
| Interest | 5 000 |
| Administrative | <u>7 000</u> |
| | 39 000 |
| PROFIT | \$33 000 |

Total assets at the start of the accounting period was \$23 000, and at the end of the period \$34 000.

| | | |
|--------------------------|---|---|
| Profit ratio | = | $\frac{33\ 000}{129\ 000}$ |
| | = | 26% or 0.26:1.0 |
| Rate of return on assets | = | $\frac{33\ 000}{(23\ 000 + 34\ 000)/2}$ |
| | = | $\frac{33\ 000}{28\ 500}$ |
| | = | 116% or 1.16: 1.0 |
| Times interest earned | = | $\frac{33\ 000 + 5\ 000}{5\ 000}$ |
| | = | 7.6 times |

Leverage ratio

| DEBT TO EQUITY RATIO | |
|---|--|
| $= \frac{\text{Liabilities}}{\text{Equity}}$ | |
| INCREASING | DECREASING |
| Higher level of externally owed debt (liabilities) compared to internally generated debt (owner's equity). If interest rates are high this could be concerning. Liabilities may have increased. | Higher level of internally generated debt (owner's equity) compared to externally owed debt (liabilities). Owner's equity may have increased. A ratio of 1.0:1.0 or 100% indicates the business does not rely too heavily on external finance. |

Example of leverage ratio calculation

The business information listed in the liquidity ratio calculation above shows total liabilities of \$188 000. Equity is calculated using the accounting equation:

$$\begin{aligned}
 \text{Eq} &= \text{A} - \text{L} \\
 &= 297\,000 - 188\,000 \\
 &= \$109\,000
 \end{aligned}$$

$$\begin{aligned}
 \text{Debt to equity} &= \frac{188\,000}{109\,000} \\
 &= 172\% \text{ or } 1.72: 1.0
 \end{aligned}$$

Market ratios

| EARNINGS PER SHARE | |
|---|---------------------------|
| $\frac{\text{Profit after income tax} - \text{Preference dividends}}{\text{Weighted average number of ordinary shares issued}}$ | |
| INCREASING | DECREASING |
| Greater return to shareholders Higher profit per share. | Lower shareholder return. |

| PRICE/EARNINGS | |
|---|---|
| $= \frac{\text{Market price per ordinary share}}{\text{Earnings per ordinary share}}$ | |
| INCREASING | DECREASING |
| Shareholders value the company higher The market values the shares higher. | Shareholders don't value the shares The market does not value the shares highly. |

| DIVIDEND YIELD | |
|--|--------------------------------|
| $\frac{\text{Annual dividend per ordinary share}}{\text{Market price per ordinary share}}$ | |
| INCREASING | DECREASING |
| Market considers company a good investment. | Less interest from the market. |

Examples of market ratio calculations

From this extract of Income Statement and Balance Sheet information, market ratios can be calculated as follows.

Balances as at 30 June 2030

| | |
|---------------------------------------|-------------|
| Profit after income tax | \$560 000 |
| 300 000 preference shares at \$5 each | \$1 500 000 |
| 1 000 000 ordinary shares at \$1 each | \$1 000 000 |

Preference share dividends of 3% were paid

Total ordinary dividend for the year = \$200 000

50 000 of these ordinary shares were issued on the 1 April 2030

$$\begin{aligned} \text{Earnings per share} &= \frac{560\,000 - (1\,500\,000 \times 0.03)}{(950\,000 \times 9/12) + (1\,000\,000 \times 3/12)} \\ &= 54 \text{ cents per share} \end{aligned}$$

$$\begin{aligned} \text{Price/earnings ratio} &= \frac{1.00}{0.54} \\ &= 1.85 \text{ times} \end{aligned}$$

$$\begin{aligned} \text{Dividend yield} &= \frac{(200\,000/1\,000\,000)}{1.00} \\ &= 20\% \end{aligned}$$

Ratio comparisons

Ratios may be calculated and then compared with:

- Previous year's results
- Budgeted or predicted results
- Industry averages
- Other businesses.

Limitations in assessing performance from financial statement analysis and from traditional financial accounting

- **Historical cost accounting:** does not allow for consideration of the current market values, and ignores the effects of inflation.
- **Lack of comparability between entities:** different methods of applying Accounting Standards, different non-quantifiable characteristics.
- **Lack of disclosure:** impossible to achieve full disclosure, companies need to retain some market confidentially for competitive advantage, directors not being incentivised to make full disclosure.

TEST YOUR KNOWLEDGE

CHAPTER 8: RATIOS

1. Explain why a business owner might use ratio analysis, giving an example.

2. Define liquidity and profitability. Explain how a business can have both high profitability and low liquidity.

3. Over a long period of time what results are most likely to occur for a highly geared business?

4. The following information is for the business *Ball Sports*, which sells basketball and football related goods to Western Australian sporting teams. This information was compiled by the business owner on the 30 June 2029.

| Balance Sheet extract | | Income Statement extract | |
|------------------------|--------|--------------------------|---------|
| Cash at bank | 5 000 | Cash sales | 123 000 |
| Debtors | 22 000 | Cost of sales | 82 000 |
| Inventory | 38 000 | Administrative expenses | 1 000 |
| Prepaid advertising | 3 300 | Selling expenses | 6 000 |
| Furniture and fittings | 96 000 | Marketing expenses | 5 000 |
| Delivery van | 66 000 | Financial expenses | 7 000 |
| Office equipment | 83 000 | | |
| Accrued wages | 8 900 | | |

| | |
|-----------|---------|
| Overdraft | 7 000 |
| Creditors | 76 000 |
| Mortgage | 129 000 |

Total assets at 30 June 2028 = \$323 200

2028 ratio calculations:

| | | |
|--------------------------|---|------|
| Gross profit ratio | = | 20% |
| Expense ratio | = | 25% |
| Rate of return on assets | = | 7% |
| Working capital | = | 50% |
| Debt to equity | = | 203% |

Required:

- Calculate profitability, liquidity and leverage ratios for the 2029 financial year.
- Interpret the results of these calculations for the owner, in comparison to the 2028 information.
- Are selling and marketing expenses very different to each other? Which expense ratio is of most concern if these two categories are combined together as “advertising expenses”? Explain.

5. Consider the following comparative data for the business *Day Cafe*, over three years.

| YEAR | 2025 | 2026 | 2027 |
|--------------------------|----------|----------|----------|
| Assets | | | |
| Prepaid rent | 8 000 | 11 000 | 12 000 |
| Prepaid advertising | 2 000 | 2 000 | 3 000 |
| Accounts receivable | 43 000 | 25 000 | 28 000 |
| Petty cash | 400 | 600 | 100 |
| Cash at bank | 0 | 25 000 | 28 000 |
| Stock | 290 000 | 260 000 | 230 600 |
| Café furniture | 89 000 | 89 000 | 89 000 |
| Computer equipment | 11 000 | 5 000 | 5 000 |
| Kitchen fittings | 230 000 | 230 000 | 340 000 |
| Accumulated depreciation | -100 000 | -120 000 | -140 000 |
| Liabilities | | | |
| Loan - due 2050 | 320 000 | 300 000 | 290 000 |
| Accrued wages | 5 000 | 6 000 | 8 000 |
| Overdraft | 7 000 | 0 | 0 |
| Accounts payable | 39 000 | 40 800 | 45 000 |
| Owner's equity | | | |
| Capital | 200 000 | 200 000 | 200 000 |
| Add: Profit | 2 400 | (19 200) | 52 700 |

Required:

- Calculate liquidity and gearing ratios for the business for the 2026 and 2027 financial years.
- Analyse each ratio.
- Advise the business owner on their best course of action to finance a renovation of the cafe.

6. What are the limitations in assessing performance from financial statement analysis and from traditional financial accounting?

7. Consider the following information for the company *Aid Pharmaceuticals*.

Balances as at 30 June 2024:

| | |
|--|-------------|
| Profit after income tax | \$980 000 |
| 700 000 preference shares at \$6 each | \$4 200 000 |
| 2 000 000 ordinary shares at \$0.50 each | \$1 000 000 |

Other information:

Preference share dividends of 2% were paid

Total ordinary dividend for the year = \$550 000

80 000 ordinary shares were issued on the 1 January 2024

Required:

- (a) Calculate market ratios for the 2024 year.
- (b) Clearly explain the relevance of the dividend yield to a potential investor in this company.

8. Calculate and interpret efficiency ratios from this information.

Balances at 30 June 2029:

| | |
|---------------------|-----------|
| Accounts Receivable | \$102 000 |
| Credit Sales | \$441 000 |
| Inventory | \$45 000 |
| Cost of Sales | \$190 000 |

Balances at 30 June 2030:

| | |
|---------------------|-----------|
| Accounts Receivable | \$103 000 |
| Inventory | \$65 000 |

9. The following financial information is provided for the company Shelly Ltd.

Statement of Financial Position
As at 30 June 2026

Assets

| | |
|---------------------|----------------|
| Cash at bank | 10 900 |
| Accounts receivable | 43 700 |
| Inventory | 36 500 |
| Plant and equipment | 102 400 |
| Total Assets | 193 500 |

Liabilities

| | |
|--------------------------|----------------|
| Accounts payable | 19 800 |
| Tax payable | 6 790 |
| Loan | 77 700 |
| Total Liabilities | 104 290 |

Equity

| | |
|---------------------|---------------|
| Retained earnings | 34 210 |
| Share capital | 55 000 |
| Total Equity | 89 210 |

Statement of Comprehensive Income
For the year ended 30 June 2026

| | |
|----------------------------|----------------|
| Sales | 980 000 |
| Less: Cost of sales | (660 000) |
| Gross Profit | 320 000 |
| | |
| Less: Expenses | |
| General and administrative | (163 900) |
| Financing | (10 500) |
| Other | (50 200) |
| Total expenses | 224 600 |
| | |
| Profit before tax | 95 400 |
| Income tax expense | (9 870) |
| Profit after tax | 85 530 |

All sales are on credit.

Accounts receivable at 30 June 2025 was \$45 000 and inventory \$35 700.

Shares were originally issued at a price of 55c per share and have a current market price of \$1.33.

Calculate and interpret the following:

- (a) Working capital ratio
- (b) Efficiency ratios
- (c) Profit ratio
- (d) Market ratios
- (e) Interpret the efficiency and market ratios and explain which are more likely to be used by internal or external stakeholders of the business.

10. Educational Supplies International sells educational resources globally. They have hired you to analyse the following financial statements. Analyse the company's recent performance by calculating the relevant ratios.

**Educational Supplies International
Statement of Comprehensive Income**

| | 2023 | 2024 |
|------------------------------------|----------------|----------------|
| | \$ '000 | \$ '000 |
| Revenue [all sales on credit] | 18 000 | 20 000 |
| Cost of sales | 12 600 | 16 400 |
| Gross profit | 5 400 | 3 600 |
| Other income | 1 000 | 2 000 |
| Expenses (excluding finance costs) | 2 100 | 2 300 |
| Finance costs (interest) | 300 | 300 |
| Profit before income tax | 4 000 | 3 000 |
| Income tax expense | 1 200 | 900 |
| PROFIT FOR THE PERIOD | 2 800 | 2 100 |

**Educational Supplies International
Statement of Financial Position**

| | 2023 | 2024 |
|---------------------------------|----------------|----------------|
| | \$ '000 | \$ '000 |
| ASSETS | | |
| Non-current assets | | |
| Property, plant and equipment | 15 000 | 16 000 |
| Current assets | | |
| Inventories | 3 500 | 4 000 |
| Trade receivables | 1 500 | 3 000 |
| Prepayments | 500 | 800 |
| Cash and equivalents | 4 500 | 6 000 |
| | 10 000 | 13 800 |
| Total assets | 25 000 | 29 800 |
| EQUITY & LIABILITIES | | |
| Equity | | |
| Share capital (50 cent shares) | 4 000 | 4 000 |
| Retained earnings | 10 800 | 12 900 |
| Total equity | 14 800 | 16 900 |
| Non-current liabilities | | |
| Long-term borrowings | 3 000 | 4 000 |
| Current liabilities | | |
| Trade and other payables | 3 500 | 5 500 |

| | | |
|---------------------------------------|---------------|---------------|
| Short-term borrowings | 2 500 | 2 500 |
| Income tax payable | 1 200 | 900 |
| | <hr/> | <hr/> |
| | 7 200 | 8 900 |
| Total liabilities | <hr/> | <hr/> |
| | 10 200 | 12 900 |
| Total equity & liabilities | 25 000 | 29 800 |
| <i>Ordinary dividends</i> | 1 400 | 1 050 |
| <i>Share price</i> | 2.40 | 1.50 |





TRIAL TEST 1: THEORY AND CASH BUDGETING

| | | |
|--------------------------|---------------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 45 | Section 2 – Practical Questions | 35 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- Ethics is best defined as:
 - The exploitation of employees in order to maximise profits.
 - Acceptance of gifts from suppliers.
 - A set of principles to help people to legally get away with doing the wrong thing.
 - A set of principles to help people decide what is right or wrong.
- One of the benefits of CSR are:
 - Higher operating business costs.
 - Loss of competitiveness.
 - Community respect and earning a good reputation.
 - Breaches of confidentiality to gain a competitive advantage.
- Costs of CSR may include:
 - Paying for managers to visit China.
 - Operating in third world countries to take advantage of cheaper labour.
 - Time of employees involved in helping out in the community.
 - Increase level of tax payable to the federal government.
- Appropriate management of accounts receivable may include:
 - Making sure store stock is visible to the passing traffic.
 - Making sure suppliers are paid on time.
 - Making all customers purchase inventory with cash terms only.
 - Following up overdue accounts.
- Appropriate management of cash may include:
 - Making sure all inventory is stored in a secure location.
 - Making sure long-term debt is financed over more than a one-year period.
 - Not giving CEO's a annual bonus.
 - Banking cash receipts daily.
- What is one advantage of preparing a cash budget?
 - Higher credit rating.
 - Knowing when cash may be idle and can therefore be invested.
 - It makes doing the businesses annual tax return quicker.
 - It is quick and easy to do.
- Which of the following items are included in a Cash Budget?
 - Depreciation.
 - Accumulated Depreciation.
 - Cash receipts.
 - Bad debts.

8. Which of the following items are *not* included in a Cash Budget?
- Gain on sale of asset.
 - Cash sales.
 - Payment received from accounts receivable.
 - Interest received from the bank.
9. Which of the following items is *not* included in a Budgeted Income Statement?
- Cash receipts.
 - Loan repayments.
 - Accounts receivable.
 - Depreciation.
10. Which of the following is *not* an advantage of preparing a cash budget?
- Knowing when a shortage of cash may occur.
 - Knowing when there is an excess of cash.
 - Refusal of suppliers to supply goods on credit.
 - Knowing when non-current assets may be purchased.

SECTION 2 – PRACTICAL QUESTIONS (35 MARKS)

Halle Trinity owns a Cupcake Shop in the Perth Mall, which supplies cupcakes to hotels and businesses around Perth and Fremantle. She would like to take over the sweet shop next door so that she can offer high tea parties. The rent of the shop next door is being subsidised by the Mayor of Perth and costs \$2 000 per month.

The following information has been provided for transactions that are expected to take place during the next three months.

The actual sales for January were \$120 000, February \$90 000 and March \$104 000. The estimated sales are for April \$108 000, May \$97 000 and June \$125 000. Usually 70% of sales are for cash with the remainder on credit. Of the credit sales 20% are received in the month after the sale and 10% in the second month following the sale.

The business has a policy of purchasing inventory on credit and paying for the purchases in the next month. Details of purchases are:

| Purchases | Actual | Estimate |
|-----------|--------|----------|
| Mar | 60 000 | |
| Apr | | 60 000 |
| May | | 65 000 |
| Jun | | 60 000 |

- The Cost of Sales for the quarter should be \$185 000.
- The electricity bill of \$2 000 should be paid in April to cover April and May. An amount of \$1 000 for electricity used in June will be paid in July.
- Rent of \$3 000 per month is paid in advance for the following 3 months April, May and June. The next payment is due on 1 April 2025.
- An advertising campaign is to be undertaken over the next few months, April to end of June. The expense is \$800 per month. The payment for the advertising for the 3 months will be made in May.
- During May 2025 it is planned to sell one of the large ovens. It is expected that the oven, which had an original cost of \$40 000, will have been depreciated by \$36 000 at the time of sale and \$7 000 should be received in cash. At the same time, a new oven will be purchased for \$5 000 deposit with the balance of \$25 000 being paid in cash in June. Insurance for this

oven is \$500 for the next 5 months, it will be paid in May. The new oven will be depreciated at 20% reducing balance.

- Wages are a total of \$20 000 per month. At the end of June \$800 in wages will be owing.
- Halle will withdraw \$500 from the business in May.
- Loan repayments of \$2 000 will continue to be made each month. This includes \$400 interest per month.
- The business has a bank balance of \$100 CR at 1 April 2025.

You are required to:

1. Prepare a cash budget for Trinity Cupcakes for the months of April – June 2025 showing the cash balance at the end of each month.
[22 marks]
2. Prepare a budgeted income statement for Trinity Cupcakes for the 3 months ending 30 June 2025.
[12 marks]
3. Advise Halle as to whether she should sign a 12 month lease for the shop next door.
[1 mark]

TRIAL TEST 2: CAPITAL BUDGETING



| | | |
|--------------------------|-----------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 27 | Section 2 – Short Answer | 28 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- Which of the following statements is **false**?
 - Capital investment decisions involve large sums of money.
 - Capital investment decisions may be considered high risk.
 - Capital investment decisions are low risk.
 - Capital investment decisions usually involve non-current assets.
- The concept of the time value of money recognises that:
 - Accountants should charge by the hour.
 - The value of money decreases with time.
 - The value of money increases with time.
 - Liquidity is vital to business survival.
- The golden rule of the NPV method of Capital Budgeting is:
 - Reject investments with a zero NPV.
 - Accept investments with a negative NPV.
 - Non-acceptance of the time value of money concept.
 - Accept investments with a positive NPV.
- One advantage of the Payback method is that:
 - It takes into account consumer preferences.
 - It is recognised by the Australian Tax Office.
 - It takes into account the time value of money.
 - It is simple and objective.
- Which of the following statements in relation to the Payback method is **false**?
 - It does not take into account the time value of money.
 - Cash received after the Payback period is not considered.
 - It takes into account factors such as government regulations.
 - The method confines itself to cash flows, rather than accrual returns.
- Which factors do not affect capital investment decisions?
 - Government regulations.
 - PAYE tax percentages.
 - Consumer preferences.
 - Competition.
- One disadvantage of the NPV method is that:
 - It takes into account all cash flows for the entire project and not just during the payback period.
 - It takes into consideration the time value of money.
 - More complicated to use in comparison to the Payback method.
 - Very simplistic.

8. The net cash flows for the Payback method:
- (a) May be different each year or constant.
 - (b) Must include depreciation.
 - (c) Must include accumulated depreciation.
 - (d) Must take into account cash flows received after the payback period.
9. Which of the following statements is **true**?
- (a) Capital budgeting is a short term planning tool.
 - (b) Capital budgeting projects must be paid back under five years.
 - (c) The Payback method takes into account liquidity.
 - (d) Capital budgeting is usually too expensive for small businesses to use.
10. Which of the following statements is **false**?
- (a) Any salvage value in the Payback method needs to be deducted from the initial cost of the investment.
 - (b) The Payback method recognises that just because an investment can be paid back in the shortest time does not mean it is the best alternative for the business to implement.
 - (c) The NPV method takes into account the time value of money.
 - (d) The NPV method is sensitive to the discount rate used.

SECTION 2 – PRACTICAL QUESTIONS (28 MARKS)

1. Dale Brown is considering the acquisition of new machinery to the value of \$300 000. It is estimated it will cost \$250 to transport the equipment to his farm and a further \$2500 to have it installed correctly. If purchased it is estimated the machinery will increase net cash flows by \$65 000 per year. The machinery has an estimated useful life of 15 years and an estimated residual (scrap) value of \$80 000. Dale Brown has a required rate of return for all projects of 10% and the predetermined payback period for investments is 4 years. Assume all cash flows are received evenly throughout the year. Ignore any tax implications.
- (a) (i) Calculate the payback period for the machinery, in years and months.

Workings:

Payback period: _____

[2 marks]

- (ii) Based on the payback method explain briefly whether the machinery is an acceptable investment. [1 mark]

- (b) (i) Calculate the net present value of the machinery. Round all figures to two decimal places. [7 marks]

Workings:

Net present value: _____

- (ii) Based on the net present value method explain briefly whether the machinery is an acceptable investment. [1 mark]

- (c) Capital budgeting provides the quantitative analysis required to appraise the viability of capital investments. There are other things, which need to be accounted for before the business spends large amounts of capital. List and discuss three factors, which need to be taken into consideration.

[6 marks]

2. Tabitha Jones is considering the acquisition of new equipment to the value of \$200 000. If purchased it is estimated the equipment will increase net cash flows by \$30 000 per year. The equipment has an estimated useful life of 10 years. Silvia has a required rate of return for all projects of 12% and the predetermined payback period for investments is 5 years. Assume all cash flows are received evenly throughout the year. Ignore any tax implications.
- (a) (i) Calculate the payback period for the equipment, in years and months.

Workings:

Payback period: _____

[2 marks]

- (ii) Based on the payback method explain briefly whether the machinery is an acceptable investment.

[1 mark]

- (b) (i) Calculate the net present value of the machinery. Round all figures to two decimal places.

Workings:

Net present value: _____

[7 marks]

- (ii) Based on the net present value method explain briefly whether the equipment is an acceptable investment.

[1 mark]

TRIAL TEST 3: CVP AND COST ACCOUNTING



| | | |
|--------------------------|-----------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 34 | Section 2 – Short Answer | 24 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- What is the term given to revenues minus variable costs?
 - Net profit.
 - Manufacturing overheads.
 - Gross profit.
 - Contribution Margin.
- A job order costing system would be appropriate for a business, which produces:
 - Made to order bespoke furniture.
 - DVD players.
 - Bicycles.
 - Fast food.
- If the contribution margin per unit is \$40 and the selling price is \$200, what is the contribution margin percentage?
 - 10%
 - 5%
 - 20%
 - 0.5%
- At the break-even point, the operating income is:
 - Less than zero.
 - Equal to zero.
 - Greater than zero.
 - All of the above.
- If the contribution margin per unit is \$500 per unit and the break-even per unit is \$50 then the fixed cost will be:
 - 25 000
 - 2 500
 - 450
 - 550
- The budgeted direct labour hours are 3 000 and the direct labour cost rate is \$400 per labour hour then the total direct labour rate is:
 - \$3 400
 - \$2 600
 - \$1 200 000
 - None of the above.

7. If the overhead cost of operating a machine is \$500 000 for 1000 hours then the cost allocation rate is:
- \$50 per machine hour.
 - \$500 per machine hour.
 - \$1000 per machine hour.
 - \$250 per machine hour.
8. Indirect costs can best be defined as:
- Indirect costs are always fixed.
 - Indirect costs are always manufacturing overhead costs.
 - Indirect costs are those which cannot be directly associated with a product or service.
 - None of the above.
9. Manufacturing costs typically consist of:
- Direct materials, direct labour and manufacturing overheads.
 - Direct materials, direct labour and administration costs.
 - Direct materials, direct labour, depreciation and office costs.
 - Manufacturing and marketing costs.
10. In job order, the basic document to accumulate the cost of each order is the:
- Job cost sheet.
 - Purchase order.
 - Receipt.
 - Invoice.

SECTION 2 – PRACTICAL QUESTIONS (24 MARKS)

1. Boylen Enterprises manufactures DVDs and USBs. The market for both products is growing at 25% per annum. You have been given the following information:

| | DVDs | USBs |
|------------------------------|-----------|--------|
| Number of units manufactured | 15 000 | 25 000 |
| Machine hours per unit | 4 | 2.5 |
| Selling price per unit | 47 | 48 |
| Direct materials per unit | 12 | 8 |
| Direct Labour per unit | 5 | 7 |
| Variable Overheads | 10 | 8 |
| Total Fixed Costs | \$250 000 | |

- (a) Calculate the contribution margin for the DVDs. [2 marks]

- (b) Calculate the contribution margin for the USBs. [2 marks]
- (c) Calculate the contribution margin per machine hour for the DVDs. [2 marks]
- (d) Calculate the contribution margin per machine hour for the USBs. [2 marks]
- (e) Calculate the weighted average contribution margin per unit for the DVDs and the USBs. [8 marks]

(f) Calculate the break-even point in total units.

[2 marks]

(g) Calculate the margin of safety in units.

[2 marks]

2.

[4 marks]

Savage Limited uses standard costs for planning and controlling costs. The business manufactures sports energy bars. The standard cost for each batch of 100 energy bars last month is as follows:

- Direct materials: 25 kilograms at \$15.00 per kilogram.
- Direct labour: 2 hours at \$20 per hour.

Last month Savage Limited has the following accounting information.

- 80 000 energy bars manufactured.
- 16 000 kilograms of direct materials purchased and used at an actual cost of \$18 per kilogram.
- 2 00 direct labour hours worked as an actual cost of \$21 per hour.

Calculate the direct materials price variance and state whether each variance was favourable or unfavourable.

TRIAL TEST 4: RATIOS



| | | |
|--------------------------|-----------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 24 | Section 2 – Short Answer | 14 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- Which of these ratios is a measure of liquidity?
 - Asset turnover.
 - Days that sales are in inventory.
 - Working capital.
 - Rate of return on assets.
- The earnings per share ratio provides information to the company on:
 - The amount of dividends provided per share.
 - Profit per share weighted by the average number of shares.
 - Profit in total weighted by the average number of preference shares.
 - Preference dividends and share average.
- Dividend yield is an example of a:
 - Profitability ratio.
 - Market ratio.
 - Leverage ratio.
 - Asset ratio.
- If the stock turnover ratio of a company has increased over time, which of the following statements would be incorrect?
 - The stock available for sale is being sold more quickly.
 - There has been a gradual improvement in the management of the stock.
 - Less out of date stock is being held over time.
 - The company needs to consider a marketing campaign to increase sales.
- Which of the following is NOT a limitation of financial statement analysis using ratios?
 - Historical cost accounting.
 - Different methods of applying Accounting Standards.
 - Comparison with budgeted results.
 - Market confidentiality of companies.

Questions 6 to 9 relate to the information below:

The following information was provided by a company.

| Statement of Financial Position extract | \$ | Profit or Loss extract | \$ |
|--|-----------|-------------------------------|-----------|
| Cash at bank | 8 000 | Sales | 80 000 |
| Debtors | 11 000 | Cost of sales | 30 000 |
| Stock | 4 000 | Wages | 12 000 |
| Prepaid advertising | 7 000 | Rent | 8 000 |
| Furniture and fittings | 95 000 | Interest | 5 000 |
| Vehicles | 120 000 | Advertising | 4 000 |
| Accrued interest | 6 000 | | |
| Creditors | 8 000 | | |
| Mortgage | 200 000 | | |

Equity includes the profit for the year

Total assets at the start of the accounting period = \$150 000.

6. The working capital ratio is equal to:
 - (a) 1.14: 1.0
 - (b) 2.14: 1.0
 - (c) 1.10: 1.0
 - (d) 2.28: 1.0

7. The return on assets is equal to:
 - (a) 8.6%
 - (b) 14%
 - (c) 40%
 - (d) 10.6%

8. The profit ratio is equal to:
 - (a) 0.26: 1.0
 - (b) 0.62: 1.0
 - (c) 0.85: 1.0
 - (d) There is not enough information.

9. The debt to equity ratio is equal to:
 - (a) 0.14: 1.0
 - (b) 6.9: 1.0
 - (c) 14.0: 1.0
 - (d) 46.6: 1.0

10. Which of the following is a financial ratio that could be used to measure market results?
 - (a) Profitability ratio.
 - (b) Debt to equity ratio.
 - (c) Debtors collection.
 - (d) Price earnings.

Required:

- (a) The director of the company has said that the liquidity ratios prove that the company can cover short term debt from very liquid assets such as cash at bank. Is this correct? Explain, referring to the information given.

- (b) Analyse the company's efficiency ratios, referring to the information given.

[2 marks]

[2 marks]

- (c) Give an assessment of the profitability of the company. Refer to the information given in your answer.

[2 marks]

TRIAL TEST 5: COMPANIES



| | | |
|--------------------------|-----------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 40 | Section 2 – Short Answer | 20 marks |
| | Section 3 – Extended Answer | 16 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- Which of these is NOT a characteristic of a public company?
 - Must have at least three directors, at least two must live in Australia.
 - Required to hold an AGM.
 - Maintain financial and other records as specified in the *Corporations Act 2001*, including compliance with Australian Accounting Standards.
 - The value of the consolidated gross assets at the end of the financial year must be less than \$12.5 million.
- Which of these statements about the powers of directors is false?
 - the duty to exercise powers and duties with the care and diligence that a reasonable person would have.
 - the duty to exercise powers and duties in good faith in the best interests of the company.
 - the duty not to improperly use position to gain an advantage.
 - the duty to improperly use information obtained through position.
- What is not covered by the Replaceable Rules?
 - powers of directors.
 - remuneration of directors.
 - voting procedures at meetings of shareholders.
 - the calling of shareholder meetings.
- An ordinary shareholder can not:
 - Hold the most common type of shares.
 - Have specific rights to any dividends.
 - Vote at shareholders' meetings.
 - Receive payment if liquidation occurs.
- A redeemable preference share is:
 - A 'hybrid' security, with features of both debt and equity.
 - Entitled to receive a missed dividend payment when a dividend is next declared.
 - One that does not pay the holder any unpaid dividends.
 - A share that may be redeemed by the company at a later date, either by payment out of profits which would otherwise be available for dividends or out of proceeds of a issue of shares.
- Corporate Social Disclosure requires the company to:
 - Account for financial performance.
 - Show environmental costs and benefits.
 - Verify information carefully.
 - Invest in different sustainable resources.

7. An interim dividend is:
 - (a) Declared by Directors and paid during the period.
 - (b) Recommended by Directors and declared at the AGM.
 - (c) A hybrid security.
 - (d) None of the above.

8. Which of the following is NOT an income or expense amount that is shown in the Statement of Changes in Equity?
 - (a) gains on the revaluation of assets.
 - (b) losses on investments for sale.
 - (c) gains from the sale of inventory.
 - (d) changes in the fair value of specific items.

9. An increase in the profit of the company can be:
 - (a) Credited to retained earnings.
 - (b) Debited to reserves.
 - (c) Added to dividends for distribution to shareholders.
 - (d) Transferred to another account.

10. Which of these is not a characteristic of a small proprietary company?
 - (a) Separate legal entity.
 - (b) 'Pty Ltd' in name.
 - (c) More than 50 non-employee shareholders.
 - (d) Not able to invite subscriptions from the public.

SECTION 2 – PRACTICAL QUESTIONS (20 MARKS)

The company *Sports Options Ltd* is being set up to retail gym equipment. The company directors offered 100 000 fully paid \$5 ordinary shares to the public on 1 July 2027. The share issue was fully subscribed by the end of the month. Shares were allotted ten days later, and \$200 000 of expenses were paid. ASX listing occurred on the 6 August 2027 and shares traded at \$6 per share.

In the first quarter of operations the following occurred:

- Payment of a 2% dividend.
- Profit for the period of \$160 000.
- Transfer to the General Reserve of \$20 000.
- The opening balance of retained earnings is 0.

Required:

- (a) Complete the entries required in the general journal and general ledger to set up the company.



TRIAL TEST 6: REPORTING

| | | |
|--------------------------|-----------------------------|----------|
| Time allowed: 50 minutes | Section 1 – Multiple Choice | 10 marks |
| Total marks: 50 | Section 2 – Short Answer | 25 marks |
| | Section 3 – Extended Answer | 15 marks |

SECTION 1 – MULTIPLE CHOICE (10 MARKS)

- Which of these financial statements shows what is owned by the company?
 - Statement of profit or loss and other comprehensive income.
 - Statement of Financial Position.
 - Cash Flow Statement.
 - Income Statement.
- What is the main purpose of the Financial Reporting Council?
 - Ensure financial markets are fair and transparent.
 - To be an independent standard setting board.
 - Enforce listing rules.
 - Oversee the effectiveness of the financial reporting framework.
- The four main qualitative characteristics of financial information are:
 - Understandability, relevance, reliability, comparability.
 - Confidence, relevance, reliability, comparability.
 - Understandability, relevance, reliability, accuracy.
 - Understandability, confidence, reliability, accuracy.
- Information is understandable if:
 - It is predictable.
 - It can be used by stakeholders who have a basic knowledge of accounting.
 - It is neutral and free from bias.
 - None of the above.
- Information is reliable if:
 - It influences the decision making of users by helping them to correct their evaluation.
 - It can be used by stakeholders who have a basic knowledge of accounting.
 - It is neutral and free from bias.
 - None of the above.
- Bonus shares are usually:
 - Paid out of reserves.
 - Used to revalue the company.
 - Part of a cash dividend.
 - Cost required to establish the company.
- An example of a share issue cost is:
 - Wages.
 - Underwriting fees.
 - Interest.
 - Subscriptions.

8. Which of these is a Balance Day Adjustment for Accrued Expenses?
- Debit Prepaid Expense when payment made.
 - Debit Expenses and Credit Accrued Expense on Balance Day.
 - Credit Income in Advance when expense incurred.
 - Debit Accrued Income and Credit Income on Balance Day.
9. Which of these is a type of cash equivalent?
- Cash on hand.
 - Bank deposit.
 - Loan.
 - Government bonds.
10. Select the correct definition of 'financing activities' from the list below:
- Activities that result in changes in the size and composition of the contributed equity and borrowings of the business.
 - The acquisition and disposal of long-term assets and other investments not included in cash equivalents.
 - Cash on hand and demand deposits such as deposits held at call with a financial institution.
 - The principal revenue-producing activities of the entity and other activities that are not investing or financing activities.

SECTION 2 – PRACTICAL QUESTIONS (25 MARKS)

The company 'Seaview Resort' owns a number of exclusive beachside villas throughout Western Australia. The Trial Balance for the company is shown below.

Seaview Resort Trial Balance

| | \$ 000's | \$ 000's |
|---|-------------|-------------|
| Investments | 65 | |
| Property, plant and equipment | 11 600 | |
| Accumulated depreciation – Resort buildings | | 1 000 |
| Intangible assets | 55 | |
| Other non-current assets | 1 300 | |
| Current tax liability | | 13 |
| Trade and other payables | | 11 450 |
| Inventories | 18 500 | |
| Non-current assets held for sale | 10 | |
| Short term loans | | 1 700 |
| Long term borrowings | | 7 560 |
| Cash and cash equivalents | 150 | |
| Mortgage | | 5 600 |
| Share capital | | 4 280 |
| Trade and other receivables | 1 250 | |
| Reserves | | 37 |
| Retained earnings | | 1 290 |
| | 32 930 | 32 930 |

(b) Dividends

[8 marks]

SECTION 3 – EXTENDED ANSWER (15 MARKS)

“Company reporting is based on the requirements of general purpose financial reporting as set out in Australian and international accounting standards”.

Write a report explaining the role of THREE of the groups which regulate and influence the general purpose financial reporting of Australian companies.

[15 marks]



ANSWERS TO REVIEW QUESTIONS

CHAPTER 1: THEORY

1. *Corporate Social Responsibility is when a business is interested in more than just making a profit. The business strives to improve the quality of life for its employees and their families as well as the community and society at large, e.g. they may go above and beyond what most businesses do to follow environmentally friendly practices or sponsor community events, to list a few.*
2. *Ethics is knowing what is right and wrong and following the businesses set of guiding principles to do the right thing for employees, the community, and the customer. In relation to customers it means protecting consumer rights and ensuring the product or service is of the quality claimed, safe for the customer to use, and meeting voluntary requirements or codes of conduct.*
3. *Ethical dilemmas that directors, auditors or accountants may face in their role are:*
 - *Exploitation of workers.*
 - *Acceptance of gifts.*
 - *Breaches of confidentiality.*
 - *Conflicts of interest.*
4. *The costs associated with CSR can be both monetary cost and time. The benefits of CSR can aid employees, the environment and the community. Benefits for the business may be greater customer loyalty, a low employee turnover and a good public image.*
5. *Management Accounting is concerned with providing information to stakeholders within the business such as business managers. Management Accounting focuses on using CVP analysis and cost accounting along with budgeting and Capital Investment analysis to produce information to help the internal management make decisions, eg. can cheaper supplies be found, should a product line be closed, should a capital investment be made etc.*
Financial Accounting is concerned with the preparation of reports to be used by stakeholders outside of the business, such as shareholders. The reports produced are the Statement of Comprehensive Income, the Statement of Changes in Equity, the Balance Sheet and the Cash Flow Statement.
6. *The statements a financial accountant may produce are the Statement of Comprehensive Income, the Statement of Changes in Equity, the Balance Sheet and the Cash Flow Statement.*
7. *The external users of accounting information are the Australian Tax Office, creditors, investors, customers, regulatory authorities and financial institutions.*
8. *The internal users of accounting information are management, owners and employees.*
9. *Ways an accountant can help in managing a business:*
 - *Preparing Financial Statement and Audits.*
 - *Using projections for the business's future.*
 - *Reviewing the business efficiency.*
 - *Reviewing the debt situation and helping to manage growth.*
10. *Internal Control is policies and procedures put into place to ensure the assets of the business are safeguarded and used as efficiently as possible.*
11. *Three purposes of internal control are:*
 - *To ensure assets, both current and non-current, are protected against loss or damage.*
 - *For the effective utilization of assets.*
 - *Provision of information to managers to enable them to use assets effectively*
12. *The aim of an internal audit is to check that the operating systems and procedures of a business are working properly and efficiently.*

13. Accounting Standards are a set of accounting rules, which the Australian Accounting Standards Board (AASB) has issued. All public companies listed on the Australian stock exchange and some other organizations must follow these rules when they prepare accounting reports for external users.
14. Short term finance is usually offered on terms of up to twelve months. Long term finance is for any loan of a period greater than twelve months, for example a 20 year mortgage.
15. Four principles of asset management are:
- Making sure the business has appropriate levels of investment in non-current assets.
 - Making sure the business has appropriate policies for the management of cash.
 - Making sure the business is managing their accounts receivable in the appropriate manner.
 - Making sure that all inventory is being managed appropriately.
16. A business should have policies in place to try and ensure that only good customers are sold products on credit and that money owing from debtors is collected in an efficient and timely manner, for example:
- conduct credit checks – check customer credit.
 - impose credit limits on new customers – if selling product to a new customer.
 - send monthly statement to debtors – so customer is aware of the amount of money that is currently owed.
 - Follow up overdue accounts – as soon as they exceed the payment date.
 - Ensure that an appropriate separation of duties exist – recording of debtor transactions separated from handling of cash.
17. Pay any short term debt within 12 months. And do timely cash budgets to allow management to be aware of their ability to repay the debt or to put arrangements in place for how they will pay the debt back.
18. Payment occurs in the following order:
- (i) The liquidators, administrators or receivers fees and costs.
 - (ii) Secured creditors.
 - (iii) Employee entitlements owing to such wages, superannuation and annual leave.
 - (iv) Unsecured creditors.
 - (v) Shareholders.
19. Any three of the following four:
- (i) Inventory records should be maintained using the perpetual inventory system to provide more accurate information and identify fast and slow moving lines of stock.
 - (ii) Inventory should be stored in a safe, secure location to reduce the risk of stealing and loss or damage.
 - (iii) Handling of inventory should be separated from the recording of the inventory transactions, for example, an employee may steal, then falsify entries on records.
 - (iv) Business must not have an excessive amount of stock and stock must be safeguarded against loss or damage.
20. Two ways are to never owe more than the business owns. Gearing is the percentage of funding that is borrowed against the total assets of the business. The lower the gearing the better. Another way is to make sure financial planning is put into place to work out how to manage the long term debt of the business.
- 21.
- Voluntary administration – liquidation: an administrator is appointed and reports to creditors and employees about the financial circumstances of the business. They may organise to repay creditors in part. The business is then either returned to the control of the directors, or wound up and liquidated.
 - Receivership: a liquidator is appointed and takes control of all or some of the company assets, to pay out secured creditors.
- 22.
- Company internal reporting is less formal. There are no specific reports or audits required. Reporting is done at whatever time in the financial year it is required by management.
 - External reporting for a public company is stringent and monitored. Accounting Standards must be followed and Audits are compulsory. The company must use required formats for reports and follow reporting deadlines.

CHAPTER 2: BUDGETS

1. *Schedule of Receipts from Accounts Receivable for Business ABC.*

| MONTHS | TOTAL SALES | OCTOBER | NOVEMBER | DECEMBER |
|-----------|-------------|---------|----------|----------|
| August | 264 000 | 26 400 | - | - |
| September | 308 000 | 61 600 | 30 800 | |
| October | 220 000 | 154 000 | 44 000 | 22 000 |
| November | 286 000 | | 200 200 | 57 200 |
| December | 242 000 | | | 169 400 |
| TOTALS | | 242 000 | 275 000 | 248 600 |

Calculations:

August sales 10% will be collected in October

September sales 70% will be collected in September, 20% will be collected in October and 10% in November

October sales 70% will be collected in October, 20% in November and 10% in December

November sales 70% will be collected in November, 20% in December.

2. *Three Month Cash Budget for Business A*

| MONTHS | TOTAL SALES | OCTOBER | NOVEMBER | DECEMBER |
|-----------|-------------|---------|----------|----------|
| August | 132 000 | 11 880 | | |
| September | 154 000 | 30 800 | 13 860 | |
| October | 110 000 | 77 000 | 22 000 | 9 900 |
| November | 143 000 | | 100 100 | 28 600 |
| December | 121 000 | | | 84 700 |
| TOTALS | | 119 680 | 135 960 | 123 200 |

Calculations:

August sales 9% will be collected in October

September sales 20% will be collected in October and 9% in November

October sales 70% will be collected in October, 20% in November and 9% in December

November sales 70% will be collected in November, 20% in December

December sales 70% will be collected in December.

3.
(a)**Schedule of receipts from accounts receivable**

| Month | Total | August | September | October | Service fee |
|-----------|--------|--------|-----------|---------|-------------|
| July | 29 800 | 29 353 | | | 447 |
| August | 30 000 | | 29 550 | | 450 |
| September | 33 000 | | | 32 505 | 495 |

Simply Mowing – Cash Budget for August – October

| | August | September | October |
|---------------------|---------------|---------------|---------------|
| | \$ | \$ | \$ |
| Opening Balance | 8 700 | 10 553 | 22 603 |
| Receipts | | | |
| Cash sales | 28 000 | 30 000 | 32 000 |
| A/c Receivable | 29 353 | 29 550 | 32 505 |
| Service fees | <u>3 500</u> | <u>3 500</u> | <u>3 500</u> |
| | 69 553 | 73 603 | 90 608 |
| Payments | | | |
| Wages | 9 000 | 9 000 | 9 000 |
| Rent | - | - | 9 000 |
| Purchases | 35 000 | 38 000 | 39 000 |
| Purchase of equipt. | 11 000 | - | - |
| Drawings | <u>4 000</u> | <u>4 000</u> | <u>4 000</u> |
| Total Payments | 59 000 | 51 000 | 61 000 |
| Closing Balance | <u>10 553</u> | <u>22 603</u> | <u>29 608</u> |

(b)

 Simply Mowing – Budgeted Income Statement Performance Report
for the quarter ended 31 October 2025

| | Budget | Actual | Variance |
|----------------------------------|---------|---------|----------|
| | \$ | \$ | \$ |
| Sales | 188 000 | 179 500 | 8 500 U |
| Less: Cost of Sales | 111 000 | 108 000 | 3 000 F |
| Gross Profit | 77 000 | 71 500 | 5 500 U |
| Add: Other income: | | | |
| Servicing fees | 10 500 | 12 300 | 1 800 F |
| | 87 500 | 83 800 | |
| Less: Operating expenses: | | | |
| Wages | 27 000 | 28 400 | 1 400 U |
| Rent | 9 000 | 9 000 | |
| Service credit fee | 1 392 | 1 495 | 103 U |
| Depreciation | 9 000 | 9 000 | |
| | 46 392 | 47 895 | 1 503 U |
| Net Profit | 41 108 | 35 905 | 203 U |

 (c) **Comment:**

Net profit is about 12% down on budget.

This is mainly attributable to a lower than predicted sales figure, offset to some extent by higher than budgeted servicing fees.

Wages expense is also about 5% over budget, contributing to the worse than expected profit performance.

4. *Mamas Curtin Shop – Collections from Debtors*

| | | CREDIT 50% | NOVEMBER |
|-------------------------|--------|------------|---------------|
| September | 48 000 | 24 000 | 4 800 (1) |
| October | 56 000 | 28 000 | 22 400 (1) |
| November | 52 000 | 26 000 | |
| TOTAL COLLECTION | | | 27 200 |

Workings:

Purchases cash $30\,000 \times 30\% = 9\,000$

Creditors $6\,600 \text{ (TB)} \times 98\% = \$6\,468$

Discount received $6\,600 \times 2\% = 132$

Sales staff commission ex Nov $52\,000 \times 5\% = 2\,600$

Paid $2\,600 - 100 \text{ (accrued)} = 2\,500$

Wages expense = $27\,000 + 900 \text{ (nov accrued)} = 27\,900 \text{ (1)} - 1\,200 \text{ (op accrued)} = 26\,700 \text{ (1)}$

Rates expenses = $5\,400 / 12 = 450$

Rent expense = $1\,600 \text{ (2 months prepaid)} / 2 = 800$

Deprn = $6\,000 \times 30\% \times 1/12 = 150$

Sale of asset = $6\,500 - (6\,000 - 150) \text{ Gain of } 650$

(a)

| Mama's Curtin Shop Cash Budget | |
|--|----------------|
| For the month ending 30 November 2025 | |
| <i>Bank balance at beginning</i> | 3 000 |
| Receipts | |
| <i>Cash sales</i> | 26 000 |
| <i>Accounts Receivable</i> | 27 200 |
| <i>Proceeds from sale of asset</i> | <u>6 500</u> |
| | 62 700 |
| Payments | |
| <i>Cash Purchases</i> | 9 000 |
| <i>Payments to Accounts payable</i> | 6 648 |
| <i>Wages</i> | 27 000 |
| <i>Sales Commission</i> | 2 500 |
| <i>Rates</i> | 5 400 |
| <i>Shares</i> | 8 000 |
| <i>Drawings</i> | 4 000 |
| <i>Other expenses</i> | 1 200 |
| <i>Loan repayment</i> | <u>7 000</u> |
| | <u>70 568</u> |
| <i>Bank balance at end of month</i> | <u>(7 868)</u> |

(b)

Mama's Curtain Shop Performance Profit Report
For the month ending 30 November 2025

| | <i>Budget</i> | <i>Actual</i> | <i>Variance</i> | <i>F/U</i> |
|-------------------------------------|----------------|---------------|-----------------|------------|
| <i>Sales</i> | 52 000 | 59 800 | 7 800 | F |
| <i>Less Cost of Sales</i> | | | | |
| <i>COGS</i> | <u>26 000</u> | <u>27 000</u> | | |
| <i>Gross Profit</i> | <u>26 000</u> | <u>32 800</u> | | |
| <i>Add Other Income</i> | | | | |
| <i>Discount received</i> | 132 | 132 | <i>nil</i> | |
| <i>Gain on sale</i> | (850) | <u>650</u> | 1 500 | F |
| | 25 282 | 33 582 | | |
| <i>Less Operating Expenses</i> | | | | |
| <i>Wages</i> | 26 700 | 26 700 | <i>nil</i> | |
| <i>Sales Commission</i> | 2 600 | 2 990* | 390 | U |
| <i>Rates</i> | 450 | 450 | <i>nil</i> | |
| <i>Rent</i> | 800 | 800 | <i>nil</i> | |
| <i>Depreciation</i> | 150 | 150 | <i>nil</i> | |
| <i>Other expenses, inc interest</i> | <u>1 300</u> | <u>1 300</u> | <i>nil</i> | |
| <i>Total Expenses</i> | <u>32 000</u> | <u>32 390</u> | | |
| <i>Loss /Profit</i> | <u>(6 718)</u> | <u>1 192</u> | | |

(c)

- (i) Encourage debtors to pay more quickly (eg. offer discount); delay payment of creditors, arrange for a bank loan, delay purchase of NCA, raise prices of stock.
- (ii) Overall the actual profit was **greater** than the expected loss mostly due to **increase in income** in the form of sales by \$7800 and gain on sale of asset of \$650.
It follows that with a sales increase, that the 5% sales commission expense based on sales would also increased.

5.

- (a) Under the cash basis of accounting, revenues are not recorded until received in cash; expenses are assigned to the period in which cash payment is made.

Under the accrual method of accounting transactions are recorded when they occur, regardless of whether cash has been received or paid.

An entity must prepare financial reports using the accrual basis of accounting, except for cash flow information.

- (b) Liquidity is the ability to convert assets to cash eg. bank balances are more liquid than a/c receivable.

Liquidity is the ability of the business to meet its debts as they fall due. Eg. solvency.

A business can have high profitability but low liquidity because profits are determined according to transactions which have occurred regardless of whether cash is received or paid. So a business may have made a lot of sales on credit, which increases profit; but the business may not have received the money from debtors in the same period, so the bank balance may be low.

6.

(a)

| | |
|---------------------------------|--|
| Sales: | $130\ 000 + 135\ 000 + 150\ 000 = 415\ 000$ |
| Purchases: | $65\ 000 + 70\ 000 + 80\ 000 = 215\ 000$ |
| Wages: | $18\ 000 + 18\ 000 + 21\ 000 + 1\ 050 = 58\ 050$ |
| Insurance: | $18\ 000/12 \times 3 = 4\ 500$ |
| Depreciation of vehicle: | $500 \times 3 = 1\ 500$ |
| Depreciation of plant: | $1\ 200 \times 3 = 3\ 600$ |
| Interest: | $600\ \text{per month} \times 2 = 1\ 200$ |

Harry Brown Entertainers
Budgeted Income Statement
For the quarter ending 31 December 2025

| | \$ | \$ |
|---------------------------------|----------------|----------------|
| Sales | | 415 000 |
| <i>Less: Cost of goods sold</i> | | |
| Opening inventory | 26 000 | |
| Purchases | <u>215 000</u> | |
| | 241 000 | |
| <i>Less: Closing inventory</i> | <u>35 000</u> | <u>206 000</u> |
| Budgeted Gross Profit | | 209 000 |
| Add: Proceeds of sale of asset | | <u>5 500</u> |
| <i>Less: Operating expenses</i> | | |
| Wages | 58 050 | |
| Insurance | 4 500 | |
| Other | 60 000 | |
| Carrying amount of asset sold | 6 000 | |
| Depreciation of vehicle | 1 500 | |
| Interest | <u>1 200</u> | <u>134 850</u> |
| Budgeted Net Profit | | 79 650 |

(b) *Performance reports*

A performance report is a report in which the budget (cash or profit) for a business is compared with the actual performance at the end of the budget period. The variance for each element of the report is identified and shown either as a dollar figure (favourable or unfavourable) or as a percentage of the budget.

This enables the managers to clearly see which areas need improvement so that measures can be taken to effect this improvement. Identifying the problems is a first and vital step on the way to solving them and making future plans.

(c) *Timing of profit/cash budgets*

Although profitability is obviously of great importance to a firm in the medium to long term, it does not have an immediate impact on the firm's capacity to survive in the short-term. Fluctuations in profit may occur in the course of a year, but as long as the overall level of profit for the year is satisfactory, there is not a problem.

With cash it is different. A firm must have the cash to pay its bills every week (i.e. liquidity) or it will not survive. An annual cash budget might show a positive cash flow over the year as a whole that included a number of periods within it when the firm will not have the cash necessary for survival, hence the necessity to prepare cash budgets at more frequent intervals than profit budgets.

7.

*Schedule of Collections from Accounts Receivable
for each of the months of April, May and June 2025*

| <i>Month</i> | <i>Total Cash & Credit</i> | <i>Cash Sales 25%</i> | <i>Credit Sales 75%</i> | <i>April</i> | <i>May</i> | <i>June</i> |
|----------------------|------------------------------------|-------------------------------|---------------------------------|---------------|---------------|---------------|
| <i>Jan</i> | 66,400 | 16,600 | 49,800 | *8,964 | - | - |
| <i>Feb</i> | 68,000 | 17,000 | 51,000 | 15,300 | *9,180 | - |
| <i>Mar</i> | 64,800 | 16,200 | 48,600 | **23,814 | 14,580 | *8,748 |
| <i>Apr</i> | 72,000 | 18,000 | 54,000 | - | **26,460 | 16,200 |
| <i>May</i> | 68,800 | 17,200 | 51,600 | - | - | **25,284 |
| <i>June</i> | 60,200 | 15,050 | 45,150 | - | - | - |
| <u><i>Totals</i></u> | | | | <u>48,078</u> | <u>50,220</u> | <u>50,232</u> |

* 2% bad debts deducted 996 1020 972

** 2% discount allowed deducted 486 540 516

*Schedule of Payments to Accounts Payable
for each of the months of April, May and June 2025*

| | <i>Month</i> | <i>Total Cash & Purch</i> | <i>Cash Purch</i> | <i>Credit Purch Credit</i> | <i>April</i> | <i>May</i> | <i>June</i> |
|-------------------------|----------------------|---------------------------------------|-----------------------|------------------------------------|---------------|---------------|---------------|
| <i>Accounts Payable</i> | <i>Jan</i> | 22,700 | 2,270 | 20,430 | - | - | - |
| | <i>Feb</i> | 34,100 | 3,410 | 30,690 | 12,276 | - | - |
| | <i>Mar</i> | 28,000 | 2,800 | 25,200 | 15,120 | 10,080 | |
| | <i>Apr</i> | 31,000 | 3,100 | 27,900 | - | 16,740 | 11,160 |
| | <i>May</i> | 30,000 | 3,000 | 27,000 | - | - | 16,200 |
| | <i>June</i> | 32,000 | 3,200 | 28,800 | - | - | - |
| | <u><i>Totals</i></u> | | | | <u>27,396</u> | <u>26,820</u> | <u>27,360</u> |

8. Harper Enterprises

1

*Schedule of Collections from Accounts Receivable
for each of the months of April, May and June 2025*

| <i>Month</i> | <i>Total Cash & Credit</i> | <i>Cash Sales 25%</i> | <i>Credit Sales 75%</i> | <i>April</i> | <i>May</i> | <i>June</i> |
|----------------------------|------------------------------------|---------------------------|-----------------------------|---------------|---------------|---------------|
| <i>Accounts Receivable</i> | | | | | | |
| <i>Jan</i> | 66,400 | 16,600 | 49,800 | 9,960 | --- | --- |
| <i>Feb</i> | 68,000 | 17,000 | 51,000 | 15,300 | 10,200 | --- |
| <i>Mar</i> | 64,800 | 16,200 | 48,600 | 24,300 | 14,580 | 9,720 |
| <i>Apr</i> | 72,000 | 18,000 | 54,000 | - | 27,000 | 16,200 |
| <i>May</i> | 68,800 | 17,200 | 51,600 | - | - | 25,800 |
| <i>June</i> | 60,200 | 15,050 | 45,150 | - | - | - |
| <u><i>Totals</i></u> | | | | <u>49,560</u> | <u>51,780</u> | <u>51,720</u> |

2

*Schedule of Payments to Accounts Payable
for each of the months of April, May and June 2025*

| <i>Month</i> | <i>Total Cash & Credit</i> | <i>Cash Purch 10%</i> | <i>Credit Purch 90%</i> | <i>April</i> | <i>May</i> | <i>June</i> |
|-------------------------|------------------------------------|-------------------------------|---------------------------------|---------------|---------------|---------------|
| <i>Accounts Payable</i> | | | | | | |
| <i>Jan</i> | 22,700 | 2,270 | 20,430 | - | - | - |
| <i>Feb</i> | 34,100 | 3,410 | 30,690 | 12,276 | - | - |
| <i>Mar</i> | 28,000 | 2,800 | 25,200 | 15,120 | 10,080 | - |
| <i>Apr</i> | 31,000 | 3,100 | 27,900 | - | 16,740 | 11,160 |
| <i>May</i> | 30,000 | 3,000 | 27,000 | - | - | 16,200 |
| <i>June</i> | 32,000 | 3,200 | 28,800 | - | - | - |
| <u><i>Totals</i></u> | | | | <u>27,396</u> | <u>26,820</u> | <u>27,360</u> |

*Cash Budget
of Harper Enterprises
for each of the months of April, May and June 2025*

| | <i>April</i> | <i>May</i> | <i>June</i> |
|--|----------------|---------------|-----------------|
| <i>Bank Balance – Opening</i> | <u>(3 210)</u> | <u>4 854</u> | <u>26 146</u> |
| Add Receipts | | | |
| <i>Receipts from Accounts Receivable</i> | 49 560 | 51 780 | 51 720 |
| <i>Cash Sales</i> | 18 000 | 17 200 | 15 050 |
| <i>Government Bonds</i> | - | 12 000 | - |
| <i>Interest on Government Bonds</i> | - | - | <u>2 100</u> |
| <i>Total Estimated Receipts</i> | <u>67 560</u> | <u>80 980</u> | <u>68 870</u> |
| <i>Total Cash Available</i> | <u>64 350</u> | <u>85 834</u> | <u>95 016</u> |
| Less Payments | | | |
| <i>Payments to Accounts Payable</i> | 27 396 | 26 820 | 27 360 |
| <i>Cash Purchases</i> | 3 100 | 3 000 | 3 200 |
| <i>Wages</i> | 4 900 | 5 600 | 6 200 |
| <i>Other Costs (less depreciation)</i> | 22 100 | 20 900 | 23 200 |
| <i>Computer World</i> | 2 000 | 2 000 | - |
| <i>Loan Repayment</i> | - | - | 45 000 |
| <i>Advertising</i> | - | - | 72 000 |
| <i>Insurance</i> | - | <u>1 368</u> | - |
| <i>Total Estimated Payments</i> | <u>59 496</u> | <u>59 688</u> | <u>176 960</u> |
| <i>Bank Balance – Closing</i> | <u>4 854</u> | <u>26 146</u> | <u>(81 944)</u> |

9.

(a) **Workings:**

Debtors collection schedule

| Receipts from customers | Apr | May | Jun | |
|----------------------------------|----------------|----------------|----------------|----------------|
| Apr 221 000 cash – sales for Apr | - | | | |
| May 240 000 cash – sales for May | 240 000 | | | |
| Jun 235 000 cash – sales for Jun | | 235 000 | | |
| Jun sales estimates | | | 220 000 | |
| Totals | 240 000 | 235 000 | 220 000 | 695 000 |

Fuel: 15 000 + 19 000 + 17 000 = 51 000

Wages: 55 000 + 75 000 + 65 000 = 195 000

Carrying amount 30 000 – Proceeds 20 000 = loss on sale 10 000

Other cash expenses: 18 000 + 20 000 + 20 000 = 58 000

Depreciation: 18 000 × 3 months = 54 000

Insurance: 84 000 ÷ 12 = 7 000 × 3 = 21 000

TJK Pty Ltd
Budgeted Income Statement
For 3 Months Ending 30 June 2025

| | \$ | \$ |
|---------------------------------|---------------|----------------|
| Sales | | 695 000 |
| <i>Less: Estimated expenses</i> | | |
| Fuel | 51 000 | |
| Wages | 195 000 | |
| Interest paid | 75 000 | |
| Loss on sale of asset | 10 000 | |
| Other cash expenses | 58 000 | |
| Depreciation | 54 000 | |
| Insurance | <u>21 000</u> | <u>464 000</u> |
| Budgeted Profit | | <u>231 000</u> |

(b) **NB:** The Budgeted figures for this period are given below.

TJK Pty Ltd
Cash Performance Report
For The 3 Months Ended 30 June 2025

| | Budget | Actual | Variance | F/U |
|---|-----------------|-----------------|-----------------|-----|
| Opening balance | 17 600 | 17 600 | | |
| Receipts | | | | |
| Accounts receivable (221 000 + 240 000 + 235 000) | 696 000 | 682 000 | (14 000) | U |
| Proceeds of sale of truck | <u>20 000</u> | <u>20 000</u> | - | |
| Budgeted cash available | <u>733 600</u> | <u>719 600</u> | <u>(14 000)</u> | U |
| Payments | | | | |
| Fuel | 51 000 | 49 000 | 2 000 | F |
| Wages | 195 000 | 193 000 | 2 000 | F |
| Interest payment | 75 000 | 75 000 | - | |
| Loan repayment | 100 000 | 100 000 | - | |
| Purchase of truck | 250 000 | 250 000 | - | |
| Other cash expenses | 58 000 | 60 500 | (2 500) | U |
| Drawings | 24 000 | 30 000 | (6 000) | U |
| Total estimated payments | <u>753 000</u> | <u>757 500</u> | <u>(4 500)</u> | U |
| Budgeted closing balance | <u>(19 400)</u> | <u>(37 900)</u> | <u>(18 500)</u> | U |

(c) **Two benefits of budgets for TJK Pty Ltd:**

- The cash budget is forecasting a deficit of \$19 400 by the end of December and so the business can make arrangements to either avoid this (perhaps by delaying the payment for the new truck) or obtaining funds to cover the shortfall (eg. bank overdraft).
- Actual and budgeted performance can be compared to identify problem areas, and management can be motivated to improve their performance (eg. setting KPIs).

10.

- (a) The object of budgets is planning and setting targets so that problems can be anticipated and the business's performance can be evaluated.
- (b) Performance reports compare actual results with budget for each item of income and expenditure, identifying variances, both positive and negative. They will, if possible, indicate reasons for significant differences.

The purpose of performance reports is to enable the firm's management, at all levels to:

- identify problem areas where remedial action needs to be taken so that performance can be improved in the future.
- create a basis for management incentives.
- potentially identify faults in the budgeting process.

11. Select the most correct answer:

- (i) a
- (ii) d
- (iii) c
- (iv) c
- (v) b

12. Business viability relies on knowing expected cash inflows and outflows and their timeliness, for the budget period. This is so both short and long term debts can be planned for and are either paid when due or funds are borrowed to meet cash payment requirements.

13. The Master Budget sets specific targets for sales, production, distribution and financing activities. Assists in planning financial requirements and resource use.
Components: operating budget, financial budget, capital expenditure budget.

14.

(a) May 2023:

- Collections in May 2023:
- 25% of May sales (collected in May) = $0.25 \times \$70,000 = \$17,500$
- 50% of April sales (collected in May) = $0.50 \times \$62,000 = \$31,000$
- 20% of March sales (collected in May) = $0.20 \times \$55,000 = \$11,000$
- 5% of February sales (collected in May) = $0.05 \times \$60,000 = \$3,000$

Total collections in May 2023 = $\$17,500 + \$31,000 + \$11,000 + \$3,000 = \$62,500$

June 2023:

- Collections in June 2023:
- 25% of June sales (collected in June) = $0.25 \times \$80,000 = \$20,000$
- 50% of May sales (collected in June) = $0.50 \times \$70,000 = \$35,000$
- 20% of April sales (collected in June) = $0.20 \times \$62,000 = \$12,400$
- 5% of March sales (collected in June) = $0.05 \times \$55,000 = \$2,750$

Total collections in June 2023 = $\$20,000 + \$35,000 + \$12,400 + \$2,750 = \$70,150$

(b)

**Moon Corp Ltd Cash budget
for the months of May and June 2023**

| | May \$ | June \$ |
|---------------------------------------|---------------|---------------|
| Cash balance at beginning | (15 000) | 10 870 |
| Collections from debtors | 62 500 | 70 150 |
| Total estimated cash available | 50 000 | 81 020 |
| Payment to creditors | 6 300 | 8 050 |
| Fixed selling expenses | 5 000 | 5 000 |
| Variable selling expenses | 2 480 | 2 800 |
| Finance expenses | 900 | 900 |
| Administration expenses | 6 000 | 6 000 |
| Interest expense | 450 | 450 |
| Equipment purchase | 18 000 | |
| Total estimated payments | 39 130 | 26 000 |
| Cash balance at end | 10 870 | 55 020 |

15. (a)

Brewster & Co
Cash Budget
for 3 months ending 30 June 2026

| | APRIL | MAY | JUNE |
|-----------------------------------|----------------|-----------------|----------------|
| Opening cash balance | 45,000 | 81,300 | (11,540) |
| Add receipts | | | |
| Receipts from accounts receivable | 58,800 | 64,680 | 71,148 |
| Capital | 50,000 | | |
| Sale of motor vehicle | | | 10,000 |
| Loan | | | 40,000 |
| TOTAL CASH AVAILABLE | 153,800 | 145,980 | 109,608 |
| Less payments | | | |
| Payments to accounts payable | 50,000 | 49,500 | 54,540 |
| Wages | 13,500 | 13,500 | 13,500 |
| Insurance | 9,000 | | |
| Rent | | 9,840 | |
| Loan repayment and interest | | | 500 |
| Equipment | | 20,000 | |
| TOTAL PAYMENTS | 72,500 | 92,840 | 68,540 |
| Closing cash balance | 81,300 | (11,540) | 41,068 |

(b)

Brewster & Co
Budgeted Income Statement
for the 3 months ending 30 June 2026

| | | |
|-------------------------------|---------|----------------|
| Sales | 211,200 | |
| Discount allowed | 3,972 | |
| Net sales | | 207,228 |
| Less: Cost of sales | | 88,400 |
| Gross Profit | | 118,828 |
| Less expenses | | |
| Wages | 43,500 | |
| Insurance | 2,250 | |
| Rent | 14,760 | |
| Depreciation of motor vehicle | 1,750 | |
| Loss on sale of motor vehicle | 250 | |
| Interest | 167 | |
| Depreciation on equipment | 667 | 63,344 |
| Profit | | 55,484 |

CHAPTER 3: CAPITAL BUDGETING

1. Two advantages of the payback method are that it takes liquidity into account and it is simple to use. Two disadvantages of the payback method are its simplicity as it does not take into account whether the investment is the best option for the business, it only takes into account whether the investment can be paid back within a set time. Another disadvantage is that the method does not account for the time value of money.

Two advantages of the NPV method are that it takes into consideration the time value of money and it takes into account the cash flows for the entire lifetime of the proposal. Two disadvantages of NPV are that it does not take into account risk and it is a more complicated method in comparison to the payback method.

2. The time value of money concept recognises that money today does not have the same value in the future due to the impact of factors such as inflation and interest rates, and so a dollar owed today (or owned) is worth more than a dollar in the future.

- 3.
- Consumer preferences – it is crucial to consider customers preferences as they are the main source of income.
 - Competition – The competition is an important factor and must be considered because as in any industry a business must keep up with or keep ahead of competitors.
 - Government regulations – A business must operate within the law and regulations set by the government and thus it must make sure that no laws or government policy will be broken, eg. cannot invest in machinery that will pollute above the legal allowable limits.

4. In Capital Budgeting Cash Flows are on an after-tax basis. This means depreciation has usually been taken into account. Depreciation is not a cash flow therefore if it has been included as an expense amount for the NPV method then this depreciation amount needs to be subtracted to determine the actual cash outflow.

5. **NPV of Project A:**

Year 1 – \$800 000(0.9259) = 740 720

Year 2 – 650 000(0.8573) = 557 245

Year 3 – 750 000(0.7938) = 595 350

Yr 1 + Yr 2 + Yr 3 = 1 893 315 – Initial Investment \$2 000 000 = –106 685

6. **Sawyer Enterprises**

- (a) Cost of machinery \$390 000 + \$900 + \$2500 = \$393 400. Payback + \$393 000/\$78 000 = 5.04 (5 years 1 month)

- (b) No, based on the Payback Method the machinery is not an acceptable investment as it takes longer than the predetermined payback period of 4 years to payback.

- (c) NPV = PV of cash flows – PV of investment

NPV = 78 000(6.1446) + 55 000(0.3855) – 393 400

NPV = \$107 081.50

Yes the investment should be accepted as the NPV is a positive amount.

7. In Capital Budgeting the ‘cost of capital’ is the rate of return required to persuade the investor to make a given investment.

8. Capital investment decisions are long-term business decisions considered high risk because they usually involve large sums of money relative to the business size and usually involve the acquisition of non-current assets. Once a capital investment decision is made it is highly difficult to reverse. These decisions have high importance because if the business makes a bad decision it can severely affect the businesses performance in a negative manner.

9. Yes, The Great Outdoors should invest in the machine as it can be paid back in less time than the payback period of 2 years. The time required to payback is 1 year and 1 month.

10.

$$\frac{400\,000}{144\,000} = 2.77 \text{ years} = \text{approx. } 2 \text{ years and } 9 \text{ months}$$

11.

$$420\,000 \times 0.863838 = \$362\,812$$

12. *Estelle Xu – Beauty Salon*

| | | |
|------------|--------------------------|----------|
| (a) Year 1 | 27 900 – (3 400 + 37 00) | = 20 800 |
| Year 2 | 42 600 – 7 100 | = 35 500 |
| Year 3 | 64 800 – 7 100 | = 57 700 |
| Year 4 | 69 700 – 7 100 | = 62 600 |
| Year 5 | (72 700 + 16 000) | = 81 600 |

| | | |
|------------|--------|---------------|
| (b) Year 1 | 12 400 | |
| Year 2 | 24 850 | = 37 250 |
| Year 3 | 40 390 | = 77 640 |
| Year 4 | 43 820 | = 121 460 |
| | | <u>27 086</u> |
| | | 43 820 |
| | | = 7.4 months |

Payback period = 3 years and 7.4 months

| | | |
|-------|-------------------|----------|
| (c) | 14 560 × 0.9259 | = 13 481 |
| | 24 850 × 0.8573 | = 21 304 |
| | 40 390 × 0.7938 | = 32 062 |
| | 43 820 × 0.7350 | = 32 208 |
| | 57 120 × 0.6806 | = 38 876 |
| NPV = | 137 931 – 104 726 | = 33 205 |

(d) Yes as the NPV is positive \$33 207 and the expected rate of return on investment is higher than minimum rate of return. The Payback period less than 4 years which is within the time predetermined of 4 years.

(e) Discuss any two of the following, using examples:

- (i) Competitors
- (ii) Customers
- (iii) Employees
- (iv) Government Regulations

13.

(a) Calculations:

- Calculate the annual depreciation: $\frac{HC - RV}{LIFE} = \frac{1\,000\,000 - 200\,000}{8} = 125\,000$ per annum.
- Calculate net cash flows after tax: NB# Depreciation is a non-cash expense, which is a tax deduction; i.e. it reduces the amount of the annual tax payable by the entity.

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 | YEAR 8 RV |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------|--------------|
| NET CASH INFLOWS | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | |
| CASH SAVINGS | <u>75,000</u> | 75,000 | |
| RESIDUAL VALUE | | | | | | | | | 200,000 |
| TOTAL INFLOWS | 305,000 | 305,000 | 305,000 | 305,000 | 305,000 | 305,000 | 305,000 | 305,000 | |
| TOTAL OUTFLOWS | (90,000) | (90,000) | (90,000) | (90,000) | (90,000) | (90,000) | (90,000) | (90,000) | ---- |
| MAJOR OVERHAUL – CASH | | | | (70,000) | | | | | |
| TOTAL OUTFLOWS | | | | (160,000) | | | | | |
| NET CASH FLOW BEFORE DEPRECIATION | 215,000 | 215,000 | 215,000 | 145,000 | 215,000 | 215,000 | 215,000 | 215,000 | 200,000 |
| DEPRECIATION EXPENSES | (100,000) | (100,000) | (100,000) | (100,000) | (100,000) | (100,000) | (100,000) | (100,000) | ---- |

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 | YEAR 8 RV |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| TAXABLE INCOME | 115,000 | 115,000 | 115,000 | 45,000 | 115,000 | 115,000 | 115,000 | 115,000 | ---- |
| TAX PAYABLE @ 30% | (34,500) | (34,500) | (34,500) | (13,500) | (34,500) | (34,500) | (34,500) | (34,500) | ---- |
| NET CASH FLOW | 215,000 | 215,000 | 215,000 | 145,000 | 215,000 | 215,000 | 215,000 | 215,000 | 200,000 |
| Less: INCOME TAX PAYABLE | (34,500) | (34,500) | (34,500) | (13,500) | (34,500) | (34,500) | (34,500) | (34,500) | ---- |
| NET AFTER TAX CASH FLOW | 180,500 | 180,500 | 180,500 | 131,500 | 180,500 | 180,500 | 180,500 | 180,500 | 200,000 |

(b) Calculation of payback period

| | CASH INFLOWS | CASH OUTFLOWS & TAX | NET AFTER TAX CASH FLOWS | CUMULATIVE NET CASH FLOW | |
|--------|--------------|---------------------|--------------------------|--------------------------|--|
| Year 1 | 305,000 | (124,500) | 180,500 | 180,500 | |
| Year 2 | 305,000 | (124,500) | 180,500 | 361,000 | |
| Year 3 | 305,000 | (124,500) | 180,500 | 541,500 | |
| Year 4 | 305,000 | (173,500) | 131,500 | 673,000 | |
| Year 5 | 305,000 | (124,500) | 180,500 | 853,500 | |
| Year 6 | 305,000 | (124,500) | 180,500 | 1,034,000 | 146,500/180,500 = .8116(12) = 10 MONTHS |

Payback period: 5 years 10 months

(c) Calculation of net present value

| YEAR 0 | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 | YEAR 7 | YEAR 8 | YEAR 8 RV |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| (1,000,000) | 180,500 | 180,500 | 180,500 | 131,500 | 180,500 | 180,500 | 180,500 | 180,500 | 200,000 |
| | 0.9091 | 0.8264 | 0.7513 | 0.6830 | 0.6209 | 0.5645 | 0.5132 | 0.4665 | 0.4665 |
| (1,000,000) | 164,093 | 149,165 | 135,610 | 89,815 | 112,072 | 101,892 | 92,633 | 84,203 | 93,300 |

$(1,000,000) - 1,022,783 = 22,783$

NPV is positive \$22,783 indicating that the option should be accepted.

(d) Option B should be chosen for the following reasons:

- NPV is positive \$22,783.
- Has a shorter payback period.

14.

(a) Payback Period of new computer system:

Full cost price: $85,000 + 5,000 = 90,000$

| YEAR | NET CASH FLOW | CUMULATIVE NET CASHFLOW | |
|------|---------------|-------------------------|---|
| 1 | 21,000 | 21,000 | |
| 2 | 21,000 | 42,000 | |
| 3 | 21,000 | 63,000 | |
| 4 | 21,000 | 84,000 | $11,000/20,200 = 0.5446(12) = 6.5$ months |
| 5 | 20,200 | 102,200 | |

The Payback Period is 4 years 6 months or 7 months.

(b) *Net Present Value of new computer system:*

| YEAR | 0 | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 5 RV |
|--------------|---|--------|--------|--------|--------|--------|-----------|
| CASH SAVINGS | | 21,000 | 21,000 | 21,000 | 21,000 | 20,200 | 5,000 |
| | | 0.8929 | 0.7972 | 0.7118 | 0.6355 | 0.5674 | 0.5674 |
| | | 18,751 | 16,741 | 14,948 | 13,346 | 11,461 | 2,837 |

$$\text{SUM } 18,751 + 16,741 + 14,948 + 13,346 + 11,461 + 2,837 = 78,084$$

Alternative method: annuity

21,000 FOR 4 YEARS + 20,200 + 5,000

21,000(3.0373) + 20,200(.5674) + 5,000(.5674)

63,783 + 11,461 + 2,837

78,081

| YEAR | 0 | 1 | 2 |
|---------------|-------------------|----------|----------|
| CASH OUTFLOWS | (8,500) + (5,000) | (25,500) | (51,000) |
| | | 0.8929 | 0.7972 |
| | (13,500) | (22,769) | (40,657) |

$$\text{SUM } (13,500) + (22,769) + (40,657)$$

$$= (76,926)$$

$$76,926 - 78,081$$

$$\$1,155 \text{ POSITIVE}$$

(c) *The new computer system is either equal to, or one month above, the Payback Period, depending on the rounding, set by the business.*

However, the Net Present Value result is positive. Consequently, the new system should be selected, as it considers the time value of money.

15. *Great Southern Whale Tours*(a) *Net cash flows calculation:*

| | Yearly Cash Flows (\$) | | | |
|-----------------------|------------------------|----------------|----------------|----------------|
| | 0 | 1 | 2 | 3 |
| Acquisition Costs | (430,000) | | | |
| Modification Cost | (50,000) | | | |
| Incremental outflows | | (88,000) | (88,000) | (88,000) |
| Incremental inflows | | 92,000 | 92,000 | 92,000 |
| Cost Savings | | 200,000 | 190,000 | 180,000 |
| Net Cash Flows | (480,000) | 204,000 | 194,000 | 184,000 |

(b) *Payback period calculation:*

Investment Year 0 \$480,000

Less Net Cash Flow Year 1 (\$204,000)

\$276,000

Less Net Cash Flow Year 2 (\$194,000)

\$82,000

Net Cash Flow Year 3 \$184,000

Payback Period = 2.45 years

Payback Period 2 years 6 months ($0.45 \times 12 = 5.35$ rounded up to 6)

(c) *Net present value calculation:*

| Net Cash Flows | (480,000) | 204,000 | 194,000 | 184,000 |
|-------------------------|-----------|---------|---------|---------|
| NPV Discount factor 10% | 1.000 | 0.9091 | 0.8264 | 0.7513 |
| PV | (480,000) | 185,456 | 160,322 | 138,239 |

$$PV = 185,456 + 160,322 + 138,239$$

$$= \$484,017$$

$$NPV = \$484,017 - \$480,000$$

$$NPV = \$4,017$$

Recommendation:

- Payback – Not within payback period therefore reject.
- NPV – positive, return higher than required 10% therefore accept.
- NPV – considers time value of money, therefore better analysis, so accept project even though outside payback.
- Must also consider qualitative factors.

16. Select the alternative which most correctly answers the question:

- (i) a
- (ii) b
- (iii) a
- (iv) c
- (v) d
- (vi) d

17. Outline with examples any two of the following:

- Will the business be a price sensitive **cost leader or differentiate** its product?
- What unique **strategic initiatives** can be implemented?
- How will **performance management** of staff enhance business results?
- What methods of **reducing costs and risks** to the business can be implemented?

18. Sonar Ltd

| | | |
|--------------------------------|---|----------------|
| Profit after tax | = | \$ 35,700 |
| Add: Depreciation | | 306,667 |
| Net cashflow for Year 1 | | 342,367 |

19. Earthworks

- (a) Payback period for Machine B
 = $650,000/153,000 = 4.24$ years
 = $0.24 \times 12 = 2.88$ months
 = 4 years and 3 months

- (b) Net Present Value for Machine B
 $\$153,000 \times 4.8684 = \$744,865$
 $\$744,865 - \$650,000 = \$94,865$ positive NPV

(c) Annual net cash flows for Machine A

| | CASH INFLOW | CASH OUTFLOW | NET CASHFLOW |
|----------|-----------------|--------------|--------------|
| Year 1–6 | 192,500 | 38,500 | 154,000 |
| Year 7 | 104,500 | 51,000 | 53,500 |
| Year 8 | 88,000 + 90,000 | 51,000 | 127,000 |

(d) Payback Period for Machine A

| Year | NCF | Cumulative NCF |
|------|---------|----------------|
| 1 | 154,000 | |
| 2 | 154,000 | 308,000 |
| 3 | 154,000 | 462,000 |
| 4 | 154,000 | 616,000 |
| 5 | 154,000 | 770,000 |

- Payback = 4 years + $(84,000/154,000 \times 12)$
 = 4 years and 6.6 months
 = 4 years and 7 months

(e) Net Present Value for Machine A

| | | | |
|----------|---------|----------|-------------------|
| Year 1–6 | 154,000 | x 4.3553 | 670,716 |
| Year 7 | 53,500 | x .5132 | 27,456 |
| Year 8 | 127,000 | x .4665 | 59,246 |
| Total PV | | | 757,418 |
| Cost | | | 700,000 |
| NPV | | | \$57,418 Positive |

CHAPTER 4: COST ACCOUNTING

1.
 - (i) *Direct Product Costs* – These are the direct materials and direct labour costs, they can be fixed, mixed or variable. Usually they are variable as the more that is produced the greater the cost of the direct labour and direct materials.
 - (ii) *Indirect Product Costs* – Indirect product costs are things like electricity. The electricity is needed to manufacture the product but will increase as production increases so it is variable. However, some indirect costs may be fixed such as depreciation of the machinery used in production. Overheads are an example of indirect costs.
 - (iii) *Period Costs* – Period costs are all costs other than product costs. These are costs, which cannot be assigned to the product or to the cost of inventory. They are costs such as advertising, and office expenses. These costs can be fixed or variable.
 - (iv) *Sunk Costs* – Sunk costs are those, which have already been incurred and therefore cannot be changed as they are in the past.
2. *Job order costing systems are used by both the manufacturing and service industries, which produce either a unique product or identical products in small quantities.*
3. *Mark-up is the difference between the cost of a product and its selling price.*
4. *Standard costing examines the direct material variances and the direct labour variances by comparing the actual results achieved against the standard the business hoped to achieve. It then analyses why a variance, either favourable or unfavourable, has occurred.*
5. *A favourable variance means the business has done better than the standard set.*
6. *An unfavourable variance means that the business has not achieved the standard set.*
7. *The two variances analysed for Direct Materials are price variances and Usage (quantity) variances.*
8. *A Price Variance is the difference between the actual price and the standard price multiplied by the actual quantity purchased.*
9. **Reasons for a favourable material price variance:**
 - *Decrease in the overall market price.*
 - *Negotiating better prices or buying in greater quantities.*
 - *Purchasing from a different supplier or purchasing a lower quality material.*
10. **Reasons for an unfavourable material price variance:**
 - *Increase in the overall market price.*
 - *Out-dated standards.*
 - *Purchasing materials of a better quality.*
11. *The difference between the quantity used in manufacturing in comparison to the quantity that should have been used according to the standard set. It is measured in dollars.*
12. **Reasons for a favourable material usage variance:**
 - *Improvements in production methods.*
 - *Superior work performance due to hiring of better skilled workers or improved training of the work force.*

- Using better quality materials making the handling easier.
13. **Reasons for an unfavourable material usage variance:**
- Poor quality materials being purchased.
 - Out-dated standards.
 - Use of unskilled labour.
- 14.
- (i) Rate variance and (ii) Efficiency variance.
15. A Labour Rate Variance measures the Actual Labour Worked in comparison the Standard Rate set.
16. **Reasons for a favourable labour rate variance:**
- Hiring of cheaper labour such as semi skilled or unskilled workers.
 - Decrease in the overall wage rates, due to an over supply of workers.
17. **Reasons for an unfavourable labour rate variance:**
- Unions negotiating a pay rise.
 - Increase in the National Minimum wage.
18. A Labour Efficiency Variance is when either more or less direct labour hours as manufacturing input are used, in comparison to the standard quantity (in hours) allowed for the units of output produced. This variance measures the efficiency of the businesses labour force.
19. **Reasons for a favourable labour efficiency variance:**
- Improvements in production methods.
 - Superior work performance due to hiring of better skilled workers or improved training of the work force.
 - Using better quality materials making the handling easier.
20. **Reasons for an unfavourable labour efficiency variance:**
- Poor quality materials.
 - Out dated standards.
 - Faulty equipment.
21. Overhead costs are difficult to calculate as they are comprised of all the indirect costs making it difficult to trace these costs to a specific product. To overcome this most businesses will allocate overhead costs to each job on a predetermined basis and rate.
22. The overhead costs would be added to the direct labour and direct material to find the total job cost.
23. **Steps in job order costing:**
- (i) Calculate the direct material cost.
- (ii) Calculate the direct labour costs.
- (iii) Work out the overhead costs.
- (iv) Add all the costs together to get the final cost figure.
24. The unit cost is $\$6000/20 = \300 per unit.
25. Predetermined overhead recovery rate per job is $\$375\ 000/80\ 000 = \4.69 per direct labour hour used in a job.
26. An unfavourable variance of \$0.10 per kg has occurred. In total this would be an unfavourable variance of \$300.
- 27.
- Standard Direct Material per 100 muffins
 Direct materials 30kgs \times \$15 per kg = \$450/100 muffins, so \$4.50 per muffin.
- Actual Direct material per 90 000 muffins
 4500kgs at \$15 per kg = \$67 500/90 000 so \$0.75 per muffin.

A favourable variance has occurred for direct materials, the reason for this is probably that the standard set is outdated as a significant favourable variance has occurred.

Standard Direct Labour per 100 muffins

Direct labour 2 hours \times \$30 per hour = \$60/100 muffins, so \$0.60 per muffin.

Actual Direct material per 90 000 muffins

270 hours at \$27 per hour = \$7290/90 000 so \$0.08 per muffin.

A favourable variance has occurred for direct labour, the reason for this is probably that the standard set is out dated as a significant favourable variance has occurred.

28. Finns Pty Ltd

(a) Calculation of overheads.

| | |
|--|---------------|
| Factory and installation insurance | 2 000 |
| Depreciation of equipment | 1 000 |
| Repairs and maintenance of equipment | 1 000 |
| Factory and installation manager's salary | 45 000 |
| Site cleaning | 3 000 |
| Factory and installation miscellaneous costs | 13 000 |
| TOTAL | 65 000 |

(b) $65\ 000 / 2 = 32\ 500$

$32\ 500 / 2500 = \$13$ per machine hour

(c) $65\ 000 / 2 = 32\ 500$

$32\ 500^* / 10\ 000 = \$3.25$ per labour hour

(d) Direct materials

\$ 750

Direct labour

$10 \times \$ 35 = \$ 350$

Manufacturing OH

$\$13^* \times 5 = \$ 65$

Cost of manufacturing one unit

\$1 165

(e) Direct materials

\$20

Direct labour

$20 \times \$ 40 = \800

Installation OH

$\$3.25^* \times 20 = \65

Cost of installing one unit

\$885

29.

(a) Total overheads: $(60\ 000 + 200\ 000 + 20\ 000 + 76\ 000) = 356\ 000 / 4\ 000 = 89$

Overhead charge-out rate: \$89/brewing hour

(b)

| | | Light | | Premium |
|--------------------------|---------------------|--------------|-----------------|----------------|
| Ingredients | | 400 | | 480 |
| Packaging | $(1800 \times .60)$ | 1 080 | | 1 080 |
| Direct labour | (3×48) | 144 | (4×48) | 192 |
| Overhead | (4×89) | <u>356</u> | (6×89) | <u>534</u> |
| Total per batch | | 1 980 | | 2 286 |
| /1800 = Total per bottle | | \$1.10 | | \$1.27 |

Standard costs: Light

Per bottle: \$1.10

Per batch: \$1 980

Premium

Per bottle: \$1.27

Per batch: \$2 286

- (c) $1.10 \times .6 = \$1.76$
 $1.27 \times 1.6 = \$2.03$
Selling prices: *Light* **\$1.76/bottle**
 Premium **\$2.03/bottle**

30. *Tent World*

- (a) **Labour (Rate) variance** = $(AR - SR) \times ADLH$
Premium: $(41.50 - 40) - (6\ 090) = \$9\ 135\ U$
Labour (Efficiency) variance = $(ADLH - SDLHA) \times SR$ *where* $SDLHA = SDLH \times AO$
Premium: $SDLHA = (3.5 \times 2\ 100) = 7\ 350$
 $(6\ 090 - 7\ 350) \times 40 = \$50\ 400\ F$
Material (Price) variance = $(AP - SP) \times AQP$
Family: $(17 - 15) \times 2\ 100 = 4\ 200\ U$
Material (Usage) variance = $(AQI - SQA) \times SP$ *where* $SQA = SQ \times AO$
Family: $SQA = 12 \times 2\ 900 = 34\ 800$
 $(31\ 900 - 34\ 800) \times 15 = \$43\ 500\ F$
- (b) **Comment:**
- The Labour Rate Variance for the Premium tent is Unfavourable meaning the price paid per hour for wages was more than expected. This may be because staff with more experience were employed or there was a pay rate rise during the year.
 - The Labour Efficiency Variance for the Premium tent is Favourable meaning the workers completed the manufacturing of the tents in a shorter space of time than expected. This may be because the staff were more experienced and worked more efficiently.
 - The Materials Price Variance for the Family tent is Unfavourable meaning the material cost more per square metre than expected. This may be because a superior quality of fabric was purchased.
 - The Materials Usage Variance for the Family tent is Favourable meaning less material was used per tent than expected. This may be because more experienced workers were used to make the tents so there was less wastage of materials.

31.

- (a)
- Cost of Smartwatches per Batch and per Unit:**

Direct Materials Cost:*Estimated:* $800\ units \times \$6\ per\ unit = \$4,800$ *Actual:* $820\ units \times \$5.80\ per\ unit = \$4,776$ **Plastic Casing Cost:***Estimated and Actual:* $\$10\ per\ watch$ **Direct Labour Cost:***Estimated:* $20\ hours \times \$25\ per\ hour = \500 *Actual:* $22\ hours \times \$24\ per\ hour = \528 **Total Cost per Batch:***Estimated:* $\$4,800 + (\$10 \times 200) + \$500 = \$6,300$ *Actual:* $\$4,776 + (\$11 \times 200) + \$528 = \$6,312$ **Cost per Unit:***Estimated:* $\$6,300 / 200\ watches = \$31.50\ per\ watch$ *Actual:* $\$6,312 / 200\ watches = \$31.56\ per\ watch$

- (b)
- Selling Price per Smartwatch (with 20% Mark-up on Cost):**

Selling Price = $\$31.56 \times (1 + 0.20) = \$37.87 \approx \$37.87\ per\ watch$

- (c)
- Variances per Batch:**

- (i)
- Direct Materials Price Variance:**

*Actual Cost of Direct Materials - (Standard Quantity \times Standard Price)**Direct Materials Price Variance* = $(\$4,776) - (820\ units \times \$6) = -\$264$

- (ii)
- Direct Materials Usage Variance:**

(Actual Quantity Used - Standard Quantity) \times Standard Price *Direct Materials Usage Variance*= $(820\ units - 800\ units) \times \$6 = \$120$

- (iii)
- Direct Labour Rate Variance:**
- Actual Labour Cost - (Actual Hours \times Standard Labour Rate)*

Direct Labour Rate Variance = $(\$528) - (22\ hours \times \$25) = -\$22$

- (iv)
- Direct Labour Efficiency Variance:**
- (Standard Hours - Actual Hours) \times Standard Labour Rate*

Direct Labour Efficiency Variance = $(20\ hours - 22\ hours) \times \$25 = -\$50$

CHAPTER 5: COST VOLUME PROFIT (CVP) ANALYSIS

1. *Cost Volume Profit analysis looks at the relationship between costs (fixed and variable), selling price, sales volume and profit at differing activity levels.*
2. *The Contribution Margin is the financial contribution made by the sale of each unit towards covering the fixed costs. It is the difference between Selling Price and the direct Variable Costs.*
3. *The margin of safety of a product is the amount by which the expected sales are greater than the break-even point.*
4. *The break-even point is when the income being received is equal to the expenses of the business. At this point the business makes no profit but importantly is not making any loss.*
5.
 - (i) *Contribution margin is $SP - VC$ so $\$250 - \$30 = \$220$*
 - (ii) *Break-even point is $FC/SP - VC$ so $\$80/220 = 0.36$*
 - (iii) *$FC + \text{Profit Target}/SP - VC$ so $\$80 + \$8000/\$250 - \$30 = 36.73 = 37$ bicycles.*
6. **Carpet Enterprises**
 - (i) *Sales is $2\,000 \text{ carpets} \times \$2\,500 = \$5\,000\,000$
Variable costs is $\$200 + \$600 + 100 \times 2\,000 \text{ carpets} = \$1\,800\,000$.
 $CM = \text{Sales} - VC$ so $CM = \$3\,200\,000$.*
 - (ii) *CM per carpet is $\$1\,800\,000/2000 \text{ carpets} = \900 per carpet.
Profit at BE = \$0.
 $\text{Profit} = SP - VC - FC$.
 $\$0 = \$2\,500 - 900 - \$200\,000$
 $200\,000/1\,800 = 111$ carpets to breakeven.*
 - (iii) *Margin of Safety (in units) = Total sales – break even sales
 $= 2\,000 - 111$
 $= 1889$ carpets.
Margin of Safety (in dollars) = breakeven sales \times SP.
 $= 1889 \text{ carpets} \times \$2\,500$
 $= \$4\,722\,500$.*
 - (iv) *Profit = Sales – VC – FC
 $\$800\,000 = (2\,000 \text{ carpets}) - (\$900 \times 2\,000 \text{ carpets}) - 200\,000$
 $\$800\,000 = 2\,000 \text{ carpets} - \$1\,600\,000$
 $\$2\,400\,000 = 2000 \text{ carpets}$
Carpet Enterprises should charge \$1 200 per carpet.*
7. *CM per unit = $SP - VC$
CM per handbag is $\$12 - \$7 = \$5$
CM per purse is $\$6 - \$4 = \$2$
As the handbag requires 2 machine hours and the purse 1 machine hour to manufacture, this needs to be taken into consideration by working out the CM per machine hour using the formula
 $CM \text{ per machine hour} = CM \text{ per unit}/\text{machine hours required per unit}$.
CM per machine hour for handbags is $5/2 = \$2.50$
CM per machine hour for purses is $2/1 = \$2$.
As the handbag contributes \$2.50 towards profit per machine hour which is \$0.50 per hour more than the purses the business Bags Galore should maximise the production of handbags to 900 which consumes 1800 machine hours leaving 200 machine hours to produce 200 purses.*
8. *Cost to buy the casing = $\$600 \times 2\,000 \text{ lawnmowers} + FC$ of \$75 000
 $= \$1\,275\,000$.
Cost for Green Machines to make casing = $FC + VC$
 $= \$100\,000 + (\$120 + \$50 + \$80) 2\,000$
 $= \$600\,000$.
Therefore Green Machines should make the casing because the business will be \$775 000 better off.*

9. Normal Production is FC of \$2 800 + 1 800 diaries × \$14 = Cost of \$28 000.
 Normal sales is 1 800 diaries at \$40 each = \$72 000.
 Special order limits normal production to 1 700 diaries × \$40 = \$68 000 + 200 diaries at \$35 which results in sales of \$75 000 if the special order is accepted. By accepting the special order the business Day Diary will increase its sales volume by an extra \$3000 so the order should be accepted.

10. AMK Ltd

- (a) Sales mix and contribution margin per unit for each product:

Train = 30 000/40 000 = .75 or 75%
 Unicorn = 10 000/40 000 = .25 or 25%

- (b) Weighted average contribution margin:

Train CM = 10 – 6 = 4
 WCM = 4 × .75 = 3
 Unicorn CM = 20 – 11 = 9
 WCM = 9 × .25 = 2.25

Total Weighted Contribution Margin is 2.25 + 3 = 5.25

- (c) Break-even point in units = 50 000/5.25 = 9 523.81 units

- (d) Sales mix of games to breakeven.

| | |
|--------------------------------------|-------------------------------------|
| 150 000 / 5.25 = 28 572 | 50 000 / 5.25 = 9 524 |
| Train = 28 572 × .75 = 21 429 units | Train = 9 524 × .75 = 7 143 units |
| Unicorn = 28 572 × .25 = 7 143 units | Unicorn = 9 524 × .25 = 2 381 units |

- (e) Sales units required to reach target profit of \$250 000:

| | |
|--------------------------------|-------------------------------|
| 250 000 = (5.25 × Q) – 150 000 | 250 000 = (5.25 × Q) – 50 000 |
| 400 000 / 5.25 = Q | 300 000 / 5.25 = Q |
| Q = 76191 units | Q = 57 143 units |

- (f) Sales mix to reach the target profit:

| | |
|--------------------------------------|---------------------------------------|
| Train = 76 191 × .75 = 57 144 units | Train = 57 143 × .75 = 42 857 units |
| Unicorn = 76 191 × .25 = 19 048 unit | Unicorn = 57 143 × .25 = 14 286 units |

- (g) Contribution Margin per machine hour:

Train = 4/2.5 = \$1.60
 Unicorn = 9/3.5 = \$2.57

- (h) Product mix for 100 000 machine hours:

Maximise Unicorn Games = 10 000 × 3.5hrs = 35 000 hours
 Leaving 65 000 hours for Train games production 65 000/2.5 = 26 000 units

11. Special Order:

Sales = 3 500 × 7 000 = \$24 500 000
 VC = 5 340 × 3 500 = (\$18 690 000)
 FC = (\$4 000)
 Opportunity Cost = 1 500 × 2 160 = (\$3 240 000)
 Profit on Special Order = \$2 566 000
 Snail Enterprises should ACCEPT the special order.

12. Qualitative Factors to consider:

- Customers
- Employees
- Competitors
- Legal Constraints
- Suppliers

13.

- (a) Breakeven point: 1 366 cleaners made.

Workings
 CM: 525 – 320 = \$205
 Breakeven Point: 280 000 / 205 = 1 366 units (rounded)

- (b) Annual profit: \$437 500

Workings:
 Profit: (525 × 3 500) – (320 × 3 500) – 280 000 = \$437 500

(c) *New Breakeven point: 1 315 cleaners made.*

New Annual profit: \$467 500

Workings:

Direct Materials: \$160 – 20% = \$128 Direct Labour: \$110 – 10% = \$99

Manufacturing Overheads: \$50 – 10% = \$45

Total Variable Costs:

\$128 + \$99 + \$45 + \$40 (purchase price of pumps) = \$312 CM = \$525 – \$312 = \$213

Breakeven Point: 280 000 / 213 = 1 315 (rounded)

Profit: (525 × 3 500) – (312 × 3 500) – 280 000 = \$467 500

(d) **Recommendation and other factors:**

The recommendation is that they would go ahead with buying the pumps as the overall variable cost decreases and profit increases.

Other factors:

- *Employees – If labour costs are decreasing may have to lay off staff. This could affect the morale of remaining employees.*
- *Competitors – if costs are now cheaper, is there room to reduce selling price to be more competitive?*
- *Customers – May increase customers if they know that parts are being sourced locally rather than from overseas suppliers*

14. Norris Nuts

Breakeven Point: 38 080 Total Units

Caps: 8 719 Units

T-shirts: 19 377 Units

Scarves: 11 627 Units

Workings:

Product Mix:

Caps – 18 000 / 82 000 = 21.95%

T-Shirts – 40 000 / 82 000 = 48.78%

Scarves – 24 000 / 82 000 = 29.27%

Contribution Margins:

Caps – 10 – 5 = 5

T-Shirts – 12 – 6 = 6

Scarves – 14 – 8 = 6

Weighted Average Contribution Margin:

Caps – 5 × 21.95% = 1.10

T-shirts – 6.0 × 48.78% = 2.93

Scarves – 6 × 29.27% = 1.76

Total WACM = 5.79 / unit

Breakeven point: 230 000 / 5.79 = 39 724 units

Production at Breakeven Point:

Caps – 21.95% × 39 724 = 8 719

T-Shirts – 48.78% × 39 724 = 19 377

Scarves – 29.27% × 39 724 = 11 627

15.

(a) *Yes, the Special Order should be accepted by Tin Can Ltd as it has a gain of \$2 500.*

Workings:

| | | | |
|------------------------------|--------------|---|--------------|
| SPECIAL ORDER | \$ | SPECIAL ORDER | \$ |
| SPECIAL ORDER INCOME | 13.00 | Special order income 3 500 × \$13 | 45 500 |
| | | | |
| SPECIAL ORDER VARIABLE COSTS | | SPECIAL ORDER VARIABLE COSTS | |
| Direct labour per unit | 5.00 | Direct labour per unit 3,500 × \$5.00 = | 17 500 |
| Direct material per unit | 3.00 | Direct material per unit 3,500 × \$3 = | 10 500 |
| Variable overheads per unit | 2.00 | Variable overheads per unit 3,500 × \$2 = | 7 000 |
| | 10.00 | | 35 000 |
| | | | |
| CONTRIBUTION MARGIN PER UNIT | 3.00 | CONTRIBUTION MARGIN | 10 500 |
| Less: Fixed costs per unit | | | |
| 8 000/3 500 | 2.2857 | Less: Fixed costs | (8 000) |
| GAIN ON SPECIAL ORDER | <u>.7143</u> | GAIN ON SPECIAL ORDER | <u>2 500</u> |

As this is a special order no commission will be payable, because no salesperson would be involved.

Any two answers to justify decision:

- There is spare production capacity, which ensures existing fixed costs are recovered.
- There is spare production capacity, which ensures no interruption to existing customers' orders.
- The order results in a profit of \$2 500, in spite of the additional fixed costs.

| | | |
|---|-------------------------|---------------------|
| (b) SPECIAL ORDER | | \$ |
| SPECIAL ORDER INCOME | $4\,300 \times \$13.00$ | 55 900 |
| SPECIAL ORDER VARIABLE COSTS | | |
| Direct labour per unit | $4\,300 \times \$5.00$ | 21 500 |
| Direct material per unit | $4\,300 \times \$3.00$ | 12 900 |
| Variable overheads per unit | $4\,300 \times \$2.00$ | <u>8 600</u> |
| | | 43 000 |
| CONTRIBUTION MARGIN | | 12 900 |
| Less: Fixed costs | | <u>(8 000)</u> |
| GAIN ON SPECIAL ORDER | | 4 900 |
| OPPORTUNITY COST ** $300 \times \$5.00$ | | <u>(1 500)</u> |
| LOSS ON SPECIAL ORDER | | <u><u>3 400</u></u> |

** Opportunity Costs

The business is 300 units in excess of production capacity by accepting the special order of 4 300 units. The cost must be determined by calculating the Contribution Margin of the business' existing product.

| | | |
|----------------------|-------------------|---------------------|
| Sales | $300 \times \$16$ | 4 800 |
| Less: Variable costs | $300 \times \$11$ | <u>3 300</u> |
| CM | | \$5 or <u>1 500</u> |

Should the special order be accepted?

Yes, the special order should be accepted:

- There is no spare production capacity, so there is the risk of an interruption to fulfilling orders from existing customers.
- It leads to a gain of \$3 400, despite the opportunity cost incurred of \$1 500.

(c) Other reporting considerations that management may need to bear in mind before accepting the special order.

Any two of:

- The reaction of existing customers if they learn of the special price and may demand the same price with future orders.
- Disgruntled customers may seek a quote from competitors who may deliberately undercut the current price in order to secure this and future orders.
- Resource production constraints.

16.

| | |
|---------------------|----------------|
| | Digital Clocks |
| Sales | 45,000 |
| Costs | |
| Direct Materials | 8,500 |
| Direct labour | 14,000 |
| Electricity | 1,500 |
| Supplies | 2,500 |
| Rental | 5,500 |
| Share of site costs | 5,000 |
| Profit/Loss | 8,000 |

By decreasing the analogue clocks, the company overall profit decreases from \$9,500 to \$8,000 this is a decrease of \$1,500. Therefore, it is not advisable for management to delete the sale of the analogue clocks.

17.

(a) **Contribution margin:****Current production**

$$900 - 200 = \$700$$

Break-even in units:**Current production**

$$140,000/700 = 200 \text{ units}$$

(b) **Profit:****Current production**

$$(900 \times 600) - [(200 \times 600) + 140,000] =$$

$$540,000 - 260,000 = 250,000$$

Alternative option

$$(750 \times 720) - [(140 \times 720) + 140,000] =$$

$$540,000 - 240,800 = 299,200$$

Margin of safety in dollars:**Current option**

$$(900 \times 600) - (900 \times 200) =$$

$$540,000 - 180,000 = \$360,000$$

Alternative option

$$(750 \times 720) - (750 \times 230) =$$

$$540,000 - 172,500 = \$367,500$$

(c) **Contribution margin ratio: Contribution margin per unit / SP per unit**

$$700 / 900 = .78$$

$$140,000 / .78 = 179,487$$

(d) **Cabinets to reach target profit:****Current production**

$$(140,000 + 7,000) / 700 = 210 \text{ cabinets}$$

18.

(a)

\$500,000+

\$600,000+

\$580,000

Variable costs = 1,680,000

$$\text{Variable cost per desk} = 1,680,000/30,000 = \$56$$

(b) **Selling price per unit = 3,630,000/30,000 = \$121**

Selling price 121

Variable cost 56

Contribution margin \$65

19.

(a) **Profit = (SP × QS) - [(VC × QS) + TFC]**

$$? = (60 \times 3,000) - [(25 \times 3,000) + 19,000]$$

$$\text{Profit} = \$86,000$$

(b) **Profit = (SP × QS) - [(VC × QS) + TFC]**

$$? = (60 \times 3,120) - [(24.25 \times 3,120) + 19,380]$$

$$\text{Profit} = \$92,160$$

(c) **TFC + TP / CM**

$$19,000 + 17,000 / 35$$

$$= 1028.57$$

Therefore 1029 tea cups

(d) **TFC / CM**

$$19,000 / 35$$

$$= 542.86$$

$$= 543 \text{ tea cups}$$

(e) $(60 \times 3,000) - (60 \times 543) = \$147,420$
 $147,420 / 180,000 = .819$
 $= 82\%$

20.

| | |
|---|-------|
| <i>Selling price</i> | 90 |
| <i>Variable cost</i> $90 \times .4$ | 36 |
| <i>Contribution margin</i> | \$54 |
| <i>Contribution margin ratio</i> (CM/SP) | 54/90 |

CM ratio = 60%

21.

(a)

| | |
|----------------------|------------------|
| <i>Chocolate box</i> | <i>Lolly mix</i> |
| 72,000/120,000 | 48,000/120,000 |
| = 60% | = 40% |

(b)

| | |
|----------------------------------|-----------------------------------|
| <i>Chocolate box</i> | <i>Lolly mix</i> |
| $7.50 - (.12 + 3.5 + .10 + .15)$ | $9.00 - (1.2 + 5.30 + .10 + .20)$ |
| = 2.55 | = 2.2 |

(c)

| | | |
|------------------|------------------|---------------------|
| <i>Chocolate</i> | <i>Lolly mix</i> | |
| $2.55 \times .6$ | $2.55 \times .4$ | |
| = 1.53 | = .88 | $1.53 + .88 = 2.41$ |

(d)

$265,000 / 2.41 = 109,959$

| | |
|----------------------|------------------|
| <i>Chocolate box</i> | <i>Lolly mix</i> |
| $109,959 \times .6$ | $2.55 \times .4$ |
| = 65,975 | = .43,984 |

22.

(a) *Sales Mix*

| | |
|---------------|------------------|
| <i>Medium</i> | $250/440 = 57\%$ |
| <i>Large</i> | $190/440 = 43\%$ |

(b) *Contribution margin*

| | |
|---------------|-------------------|
| <i>Medium</i> | $300 - 150 = 150$ |
| <i>Large</i> | $400 - 175 = 225$ |

(c) *Medium*

| | |
|----------------------------|---|
| <i>Large</i> | $150 \times .57 = 85.5$ |
| | $225 \times .43 = 96.75$ |
| <i>Weighted average</i> | $85.5 + 96.75 = \$182.25$ |
| <i>contribution margin</i> | Or $(150 \times .568) + 225 \times 43.2) = 182.4$ |

Break-even point (units) $65,450 / 182.25 = 360 \text{ units}$

(d) *Medium*

| | |
|--------------|------------------------|
| <i>Large</i> | $360 \times .57 = 205$ |
| | $360 \times .43 = 155$ |

(e) *Units to reach target profit* $65,450 + 70,000 / 182.25 = 744 \text{ units}$

- (f) *Contribution margin per factory hour for medium wheelbarrow* $150 / 1 = \$150 \text{ per hour}$ 1
Contribution margin per factory hour for large wheelbarrow $225 / 2 = \$112.50 \text{ per hour}$ 1
- (g) *The medium wheelbarrow should be produced first as it has the higher contribution margin per machine hour*
- (h) *All of the medium wheelbarrows* $250 \times 1 \text{ hour} = 250 \text{ hours used out of } 420$
Large wheelbarrow will be $420 - 250 = 170$, $170/2 = 85$ *large wheelbarrows can be produced in the remaining time*

CHAPTER 6: FINANCIAL STATEMENTS

- Discuss in detail any two of the following:

Protect external users:

 - Assisting creditors and investors and stakeholders to analyse and make informed judgements
 - Providing for comparable reports so that users can compare information over time and between entities

Assist directors in discharging their obligations:

 - Provide structure and guidance for completion of reporting obligations
 - Outline obligations of directors

Provide confidence to investors in Australian capital markets:

 - Facilitate accountability
 - Promote accurate reporting

Facilitate the Australian Capital markets:

 - Promoting market efficiency, thus reducing the cost of capital and enabling Australian entities to compete internationally
- An entity (including an economic entity) for which it is reasonable to expect the existence of users dependent on general purpose financial reports, for information which would be useful to them in making decisions about the allocation of scarce resources.
- General purpose financial statements that comply with accounting standards should present fairly the financial position, financial performance and cash flows of an organisation. This information will be useful to users in making and evaluating decisions about the allocation of scarce economic resources. When companies comply with accounting standards, their general purpose financial statements should be more comparable than they would otherwise be. This allows users of the financial statements to better compare. Financial statements also provide one means by which the management of an organisation are accountable to those who provide resources to the organisation.
- Relevance*
 Information is relevant when it influences the decision making of users by helping them evaluate events or to confirm or correct their evaluations of the situation.
 Users should be able to predict and/or confirm their decision. The predictive and confirmatory value of the information are interrelated.
 - Faithful representation*
 Financial information is faithfully represented when it has both substance and legal form. It must be complete, neutral and free from error.
 - Comparability*
 Users must be able to compare the financial reports of an entity through time in order to be able to identify trends. They may be choosing between alternatives.
 They also need to be able to compare different entities in order to be able to evaluate their relative financial position, financial performance and cash flow.
 - Verifiability*
 Verifiability of financial information means that it faithfully represents the economic conditions of the entity. Different observers would reach consensus that the information is a faithful representation. It can be direct or indirect.

(e) Timeliness

Information is timely when it is made available in enough time to influence the decisions of the users of the information.

(f) Understandability

Information should be readily understandable by users and must be classified and presented clearly. Users should have a reasonable knowledge of business and economic structures, and because of this, complex information should not be excluded from the financial reports.

5. (a) *Staff wages – Expense because of decreases in economic benefits during the accounting period in the form of outflows or depletions of assets of the asset Cash or incurrences of liabilities in the accrued expense Accrued Wages that result in decreases in equity, other than those relating to distributions to equity participants.*
 (b) *Mining truck – Asset because it is a resource controlled by the entity as a result of past events (such as the purchase of the truck) and from which future economic benefits are expected to flow to the entity through obtaining minerals from the mine.*
 (c) *Loan – Liability because there is a present obligation of the entity resulting from the past event of the loan transaction, the settlement of which is expected to result in an outflow from the entity of Cash resources embodying economic benefits.*
 (d) *Doctors fees – Income because there are increases in economic benefits during the accounting period in the form of inflows of the asset Cash.*
6. *A Cash Flow Statement shows the cash inflows and cash outflows of a company for a period of time.*
7. *Cash: cash on hand and demand deposits such as deposits held at call with a financial institution. EXAMPLE: Bank deposits.*
Cash Equivalents: short term highly liquid investments that are readily convertible to known amounts of cash that can be easily converted into cash and have an insignificant risk of change in value. EXAMPLES: Government bonds, Shares.
8. *Accrued expenses: Debit expense, credit accrued expense.*
Prepaid expenses/stock of supplies: debit prepaid expense, credit expense, on balance day adjust for the amount used up.
Accrued income: debit accrued income, credit income account
Income in advance: debit income, credit income in advance account. On balance day, adjust for the amount used.
Doubtful debts.
Depreciation: debit depreciation, credit accrued depreciation.
9. *Costs required to set up the company and start trading, eg. Prospectus and legal fees.*
10. *Ordinary: subordinate to all other classes of shares, paid out last, less rights.*
Preference: holder is entitled to a fixed dividend, and is paid before ordinary share holders.
Bonus: issued for no charge, increase the total number of shares issued but does not change company value.
11. *Financial Reporting Council (FRC): A statutory body with oversight, i.e.: oversight of the accounting and auditing standards setting processes for the public and private sectors, monitor the development of international accounting and auditing standards.*
Australian Securities and Investments Commission (ASIC): Enforce and give effect to the law by administering the ASIC Act and working under the Corporations Act.
International Accounting Standards Board (IASB): Provides guidance to regulators by cooperating with national accounting standard-setters to achieve convergence in accounting standards around the world.
Australian Accounting Standards Board (AASB): Develop and issue accounting standards that have the force of the law.
Australian Securities Exchange (ASX): Public companies in Australia with their shares listed on the securities exchange must comply with the listing requirements of the ASX. If companies do not comply with these listing rules, they are likely to be delisted so that their shares can no longer be traded on the securities exchange.

12. To enhance the confidence of users in the financial report. This is achieved by the expression of an opinion by the auditor on whether the financial report is prepared, in all material respects, in accordance with the financial reporting framework.
A second purpose of the external audit is to provide confidence to stakeholders in Australian capital markets. External stakeholders, such as shareholders, are at arms-length and cannot see into the company's finances or check that their reporting is accurate. An audit is one way of providing assurance.
13. Decide whether the financial report as a whole is free from material misstatement, whether due to fraud or error, to express an opinion on whether the financial report is prepared, in all material respects, in accordance with the financial reporting framework, to report on the financial report, and communicate the auditor's findings.
- 14.

| Cash flow statement for the year ended 31 December 2031 | |
|--|---------------|
| Cash flows from operating activities | \$ |
| Cash receipts from customers | 8830 |
| Cash paid to suppliers and employees | <u>(8400)</u> |
| Cash generated from operations | 430 |
| Interest paid | (300) |
| Income taxes paid | <u>(179)</u> |
| Net cash from operating activities | (49) |
| Cash flows from investing activities | |
| Sales of machinery | 68 |
| Purchase of machinery | (50) |
| Interest received | 400 |
| Dividends received | <u>200</u> |
| Net cash from investing activities | 618 |
| Cash flows from financing activities | |
| Repayment of borrowings | <u>(15)</u> |
| Net cash from financing activities | (15) |
| Net increase in cash and cash equivalents | <u>554</u> |
| Cash and cash equivalents at beginning of period | (60) |
| Cash and cash equivalents at end of period | 494 |

Interpretation:

- Overall positive improvement in liquidity situation.
- Operating activities did not make a major contribution.
- Large amount of investing cash inflow had most impact.

15. (a) *Workings:*

| | |
|--|-----------|
| <i>Payments to suppliers and employees</i> | \$ |
| <i>Accounts payable</i> | 778 000 |
| <i>Insurance</i> | 35 000 |
| <i>Supplies</i> | 260 000 |
| <i>Wages</i> | 135 000 |

Massimo Ltd
Cash flow statement for the year ended 30 June 2026

Cash flows from operating activities

| | |
|--------------------------------------|-------------------|
| Cash receipts from customers | 1292 000 |
| Cash paid to suppliers and employees | <u>(1208 000)</u> |
| Cash generated from operations | 84 000 |
| Interest paid | <u>(22 000)</u> |
| Net cash from operating activities | 62 000 |

Cash flows from investing activities

| | |
|------------------------------------|-----------------|
| Sale of equipment | 7 000 |
| Purchase of equipment | <u>(65 000)</u> |
| Net cash from investing activities | (58 000) |

Cash flows from financing activities

| | |
|------------------------------------|-----------------|
| Dividends paid | (45 000) |
| Net cash from financing activities | <u>(45 000)</u> |

| | |
|--|----------|
| Net increase in cash and cash equivalents | (41 000) |
| Cash and cash equivalents at beginning of period | 55 000 |
| Cash and cash equivalents at end of period | 14 000 |

(b) *Final cash balance is not a reliable indicator of final profit – profits for Massimo were sound however the cash balance reduced considerably.*

A number of non-cash items such as depreciation will affect the income statement.

A number of cash items were significant in this financial year, such as the purchase of equipment for cash.

16. (a) *Workings:*

Accounts Receivable

| | | | |
|---------|---------|---------|---------|
| Bal b/d | 39 000 | Bank | 321 500 |
| Sales | 325 000 | Bal c/d | 42 500 |

Receipts from customers:

| | |
|-----------------------------------|-----------------------|
| Cash sales | 156 000 |
| Receipts from accounts receivable | <u>321 500</u> |
| Total | 477 500 |

Inventory

| | | | |
|------------------|---------|---------------|---------|
| Balance | 95 000 | Cost of Sales | 130 000 |
| Accounts Payable | 138 000 | Bal c/d | 103 000 |

Accounts Payable

| | | | |
|---------|---------|-----------|---------|
| Bank | 129 300 | Bal b/d | 25 700 |
| Bal c/d | 34 400 | Inventory | 138 000 |

Office Salaries

| | | | |
|----------------|--------|----------------|--------|
| Bank | 95 800 | Accrued (last) | 1 600 |
| Accrued (this) | 1 800 | P&L | 96 000 |

Prepaid Insurance

| | | | |
|---------|-------|---------|-------|
| Bal b/d | 500 | Expense | 7 000 |
| Bank | 7 100 | Bal c/d | 600 |

Harper Manufacturing
Schedule of Cash Payments to Suppliers and Employees

| | |
|-----------------------------|----------------|
| | \$ |
| Accounts payable | 129 300 |
| Office salaries | 95 800 |
| Retail store expenses | 21 000 |
| Marketing expenses | 11 000 |
| Sales salaries | 63 000 |
| General expenses | 10 000 |
| Insurance expense | 7 100 |
| Office operational expenses | 16 400 |
| TOTAL | 353 600 |

*(b) Workings:***Plant and Equipment**

| | | | |
|---------|--------|---------------|--------|
| Bal b/d | 67 000 | Sale of Asset | 52 000 |
| Bank | 74 000 | Bal c/d | 89 000 |

Accumulated Depreciation Plant and Equipment

| | | | |
|---------------|--------|--------------|--------|
| Sale of Asset | 35 500 | Bal b/d | 46 000 |
| Bal c/d | 23 000 | Depreciation | 12 500 |

Sale of Asset

| | | | |
|-------------------|--------|-----------------------------------|--------|
| Plant & Equipment | 52 000 | Accumulated Depreciation P & E | 35 500 |
| Gain on sale | 9 750 | Bank (Proceeds) | 26 250 |

Retained Earnings

| | | | |
|-----------------|--------|-----------------|--------|
| Dividends | 40 228 | Bal b/d | 25 600 |
| General Reserve | 20 000 | Profit and Loss | 71 628 |
| Bal c/d | 37 000 | | |

Harper Manufacturing
Statement of Cash Flows for the year ended 30 June 2024

| | \$ |
|---|----------------|
| Cash flows from operating activities | |
| Cash receipts from customers | 477 500 |
| Cash paid to suppliers and employees | (353 600) |
| Interest paid | (16 200) |
| Income taxes paid | (23 100) |
| Net cash used in operating activities | 84 600 |
| Cash flows from investing activities | |
| Proceeds from sale of plant and equipment | 26 250 |
| Dividends received | 4 210 |
| Interest received | 2 680 |
| Purchase of plant and equipment | (74 000) |
| Net cash used in investing activities | (40 860) |
| Cash flows from financing activities | |
| Issue of debentures | 85 000 |
| Repayment of mortgage | (98 312) |
| Dividends paid | (40 228) |
| Net cash used in financing activities | (53 540) |
| Net increase (decrease) in cash held during the year | (9 800) |
| Cash and cash equivalents balance at beginning of year | 16 200 |
| Cash and cash equivalents balance at end of year | 6 400 |

17. (a)

Dumpster Chemicals
Statement of Comprehensive Income
For the Year Ended 30 June 2029

| | \$ |
|--|-------------------------|
| Revenue | 896 700 |
| Cost of Sales | <u>(206 000)</u> |
| Gross Profit | 690 700 |
| Other Income | 40 000 |
| Expenses (Excluding finance costs) | (548 226) |
| Finance Costs | <u>(15 000)</u> |
| Profit before Income Tax | 167 474 |
| Income Tax Expense | <u>(50 242)</u> |
| Profit for the Year | 117 232 |
| | |
| Other Comprehensive Income | |
| Gains on asset revaluations | 200 000 |
| Gains on available for sale financial assets | 10 000 |
| Income tax on other comprehensive income | <u>(3 000)</u> |
| Comprehensive Income, net of income tax | 207 000 |
| Total Comprehensive Income for the Year | <u><u>\$324 232</u></u> |

(b)

Dumpster Chemicals
Statement of Changes In Equity
For the Year Ended 30 June 2029

| | SHARE CAPITAL | RETAINED EARNINGS | GENERAL RESERVE | ASSET REVALUATION RESERVE | TOTAL |
|---------------------------|------------------|----------------------|--------------------|---------------------------------|-----------|
| Balance as at 1 July 2028 | 1 205 000 | (59 000) | 180 000 | 190 000 | 1 516 000 |
| DIVIDENDS | | | | | |
| Final dividend 2028 | | (45 000) | | | (45 000) |
| Interim dividend 2029 | | (30 000) | | | (30 000) |
| Comprehensive income | | 124 232 | | | 124 232 |
| Revaluation of Assets | | | | 200 000 | 200 000 |
| General Reserve | | 75 000 | (75 000) | | 0 |
| Balance as at 1 June 2029 | 1 205 000 | 65 232 | 105 000 | 390 000 | 1 765 232 |

18.

Statement of Cash Flows (Extract)**Cash Flows from Financing Activities**

| | |
|--|-------------|
| Proceeds from the issues of shares | \$1,000,000 |
| Proceeds from borrowings | \$50,000 |
| Dividends paid | (\$302,750) |
| Interest paid | (\$60,000) |
| Net cash flows from financing activities | \$687,250 |

Working out to get the above financing activities was:**Proceeds from Share Issue:**

Proceeds from Share Issue = Number of additional shares × Issue price per share

Proceeds from Share Issue = 500,000 shares × \$2 per share = \$1,000,000

Proceeds from Borrowings:

Proceeds from Borrowings = Borrowings (2022) – Borrowings (2021)

Proceeds from Borrowings = \$200,000 - \$150,000 = \$50,000

Profit after Tax:

Profit after Tax = Operating Profit before Tax × (1 - Tax Rate)

Profit after Tax = \$945,000 × (1 - 0.30) = \$661,500

Dividends Paid:

Dividends Paid = Profit after Tax - Transfer to Reserves

Dividends Paid = \$661,500 - (\$500,000 - \$400,000)

= \$661,500 - \$100,000 = \$561,500

Interest Paid:

Interest Paid = Interest Expense (2022) – Interest Expense (2021)

Interest Paid = \$60,000 - \$50,000 = \$10,000

19.

Workings:

Insurance = 4,750 × 5/12

= 1,979

Depreciation on buildings = 258,000 × .20

= 51,600

Depreciation on P&E = 368,500 - 24,000 × .20

= 68,900

Allowance for doubtful debts

| DATE | DETAILS | DEBIT \$ | DATE | DETAILS | CREDIT |
|------|-----------------|----------|------|-----------------|--------|
| | Bad debts | 400 | | Opening balance | 650 |
| | Closing Balance | 800 | | Doubtful debts | 550 |

Revenue = 685,240

| | |
|------------------------------|---------|
| Sales | 690,000 |
| Sales returns and allowances | -4,000 |
| Discount allowed | -760 |
| | - |

Cost of sales = 201,000

| | |
|-------------------|---------|
| Cost of sales | 204,000 |
| Discount received | -4,000 |
| Freight inwards | + 1,000 |

Other Income = 17,950

| | |
|--|--------|
| Rental income | 15,000 |
| Interest received from investments 2,450 + 500 | 2,950 |

Expenses excluding financial costs = 508,439

| | |
|-------------------------------------|---------|
| Insurance | 1,979 |
| Depreciation on buildings | 51,600 |
| Depreciation on plant and equipment | 68,900 |
| Doubtful debts | 550 |
| Wages (175,470 + 1,500) | 176,970 |
| Other expenses | 208,440 |

Harper Little Co
Statement of Comprehensive Income
for the year ending 30 June 2024

| | |
|--|----------------|
| | \$ |
| Revenue | 685,240 |
| Cost of sales | (201,000) |
| Gross Profit | 484,240 |
| Other income | 17,950 |
| Expenses (excluding finance costs) | (508,439) |
| Finance costs | (0) |
| Profit before income tax | (6,249) |
| Income tax expense | |
| Profit for the period | (6,249) |
| Add comprehensive income | |
| Gain on revaluation of land | 250,000 |
| Total Comprehensive Income for the period | 243,751 |

20. Labus

Working out:

| | |
|------------------------------------|------------------------------|
| Revenue | = 345,520 – 1,260 |
| Cost of sales | = 100,800 – 560 |
| Equipment depreciation | = 110,600 – 8,400 × .15 = 15 |
| Expenses excluding financial costs | = \$165 226 (shown below) |

| | |
|---------------------|-----------|
| Salaries | \$ 81,620 |
| Electricity | 4,340 |
| Stationery expenses | 21,280 |
| Office wages | 41,200 |
| Depreciation | 15,330 |
| Insurance | 1,456 |

Labus
Statement of Comprehensive Income
as at 30 June 2026

| | \$ |
|--|----------------|
| Revenue | 344,260 |
| Cost of sales | (100,240) |
| Gross Profit | 244,020 |
| Other income | 40,800 |
| Expenses (excluding finance costs) | (165,226) |
| Finance costs | (5,180) |
| Profit before income tax | 114,414 |
| Income tax expense | (34,324) |
| Profit for the period | 80,090 |
| Add comprehensive income | |
| Gain on revaluation of land | 400,000 |
| Total Comprehensive Income for the period | 480,090 |

CHAPTER 7: COMPANIES

1.

| Large Proprietary Company | Public Companies |
|---|---|
| <p>If a proprietary company exceeds any two of these: Fewer than 50 employees. The consolidated revenue of the company for the financial year must be less than \$25 million. The value of the consolidated gross assets at the end of the financial year must be less than \$12.5 million then it is classified as a large proprietary company. Must prepare financial reports, have them audited and lodge them with ASIC. Must produce a Director's Report, which must be sent to all shareholders and lodged with ASIC.</p> | <p>Must have at least 3 directors, at least two must live in Australia. Hold an AGM. Maintain financial and other records as specified in the Corporations Act 2001, including compliance with Australian Accounting Standards. Constitution lodged with ASIC along with any changes. Produce audited financial reports and a Directors' Report which must be sent to all shareholders and lodged with ASIC. If listed on ASX must comply with the additional disclosure requirements of the ASX.</p> |

2. *Mandurah Boats Ltd.*

Mandurah Boats General Journal (extract)

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|---------|--|-----------|-----------|
| 2025 | Share Trust Fund | 1 800 000 | |
| 30 Sept | Application | | 1800 000 |
| | Receipt of application money for 400 000 fully paid \$4.50 ordinary shares | | |

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|---------|--|-----------|-----------|
| 2025 | Cash at bank | 1 800 000 | |
| 30 Sept | Share Trust Fund | | 1800 000 |
| | Transfer of application money into cash at bank. | | |

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|--------|---|-----------|-----------|
| 2025 | Application | 1 800 000 | |
| 10 Oct | Share capital | | 1800 000 |
| | Transfer from application into capital. | | |

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|--------|------------------------------|----------|-----------|
| 2025 | Share capital | 400 000 | |
| 10 Oct | Cash at bank | | 400 000 |
| | Payment of share issue costs | | |

$$\begin{aligned} \text{Number of bonus shares} &= \frac{2}{100} \times 400\,000 \\ &= 8\,000 \text{ shares} \end{aligned}$$

$$\begin{aligned} \text{Additional share capital} &= 8\,000 \times \$4.50 \\ &= \$36\,000 \end{aligned}$$

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|--------|---------------------------------|----------|-----------|
| 2026 | General reserve | 36 000 | |
| 30 Jun | Share capital | | 36 000 |
| | Bonus share issue from reserves | | |

$$\begin{aligned} \text{Amount of dividend} &= 1\,800\,000 \times 3\% \\ &= \$54\,000 \end{aligned}$$

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|--------|--|----------|-----------|
| 2026 | General reserve | 54 000 | |
| 30 Jun | Dividend payable – Final | | 54 000 |
| | Declaration of dividend on 400 000 ordinary shares | | |

Payment of dividend.

| DATE | DETAILS | DEBIT \$ | CREDIT \$ |
|--------|--|----------|-----------|
| 2026 | Dividend payable – Final/Interim | 54 000 | |
| 30 Jun | Cash at bank | | 54 000 |
| | Payment of dividend on 400 000 ordinary shares | | |

3. **Participating Preference shares** – ‘hybrid’ security, with features of both debt and equity. A preference share pays a regular defined income stream, and generally has a fixed maturity date. **Cumulative preference shares** – entitled to receive missed dividend payment when a dividend is next declared. Receive priority over the claims of ordinary shareholders. **Non cumulative preference shares** – does not pay the holder any unpaid dividends. **Redeemable preference shares** – may be redeemed by the company at a later date, either by payment out of profits which would otherwise be available for dividends or out of proceeds of an issue of shares.
4. The Statement of Changes in Equity shows income and expense amounts that Australian Accounting Standards do not define as income and expense for reporting in the Statement of Profit or Loss and Other Comprehensive Income.

These directly affect equity:

- gains or losses on the revaluation of assets,
- gains or losses on investments for sale,
- changes in the fair value of specific items.

5.

| Retained Earnings | | | |
|---------------------------|---------|-----------------|---------|
| Balance b/d | 12 000 | Profit | 560 000 |
| Dividend payable – Final | 120 000 | General Reserve | 90 000 |
| Asset Revaluation Reserve | 20 000 | | |
| Balance b/d | 498 000 | | |
| | 650 000 | | 650 000 |
| | | Balance c/d | 498 000 |

Interpretation:

The final balance is a positive balance of \$498 000 of funds in this account.

6. *Karratha Cranes Ltd.*

| Karratha Cranes Ltd | |
|--|------------------|
| Statement of Changes in Equity | |
| | \$ |
| Profit for the period | <u>30 000</u> |
| Total recognised income and expense for the period | <u>30 000</u> |
| | |
| Share Capital | |
| Ordinary | |
| Share capital at 1 July 2030 | 2 400 000 |
| Issue of share capital | <u>24 000</u> |
| Share capital at 30 June 2031 | 2 424 000 |
| | |
| Preference | |
| Share capital at 1 July 2030 | 2 400 000 |
| Share capital at 30 June 2031 | 2 400 000 |
| | |
| Other reserves | |
| Asset revaluation | |
| Asset revaluation reserve at 1 July 2030 | 550 000 |
| Transfer | <u>(24 000)</u> |
| Asset revaluation reserve at 30 June 2031 | <u>526 000</u> |
| | |
| General | |
| General reserve at 30 June 2031 | 400 000 |
| | |
| Retained earnings | |
| Retained earnings at 1 July 2030 | 0 |
| ADD: | |
| Total profit recognised for period | 30 000 |
| | |
| LESS: | |
| Dividend – Ordinary | 60 000 |
| Dividend – Preference | <u>60 000</u> |
| Retained earnings at 30 June 2031 | <u>(120 000)</u> |

7.
(a)

| Statement of Changes in Equity | |
|--|--------------------|
| | \$ |
| Profit for the period | <u>1 340 000</u> |
| Total recognised income and expense for the period | <u>1 340 000</u> |
| | |
| Share capital | |
| Ordinary | |
| Share capital at start of period | 2 700 000 |
| Share capital at end | 2 700 000 |
| | |
| Preference | |
| Share capital at start of period | 1 500 000 |
| Share capital at end | 1 500 000 |
| | |
| Other reserves | |
| Asset revaluation | |
| Asset revaluation reserve at start of period | 1 590 000 |
| Revaluation increment | 90 000 |
| Asset revaluation reserve at end | 1 680 000 |
| | |
| General | |
| General reserve at start of period | 13 345 000 |
| Transfer to retained earnings | <u>(7 800 000)</u> |
| General reserve at end | <u>5 545 000</u> |
| | |
| Retained earnings | |
| Retained earnings at start of period | (2 250 000) |
| ADD: | |
| Transfer from general reserve | 7 800 000 |
| Total profit recognised for period | <u>1 340 000</u> |
| | |
| LESS: | |
| Final dividend | 1 200 000 |
| Dividend – Ordinary | 650 000 |
| Dividend – Preference | <u>250 000</u> |
| Retained earnings at end | <u>4 790 000</u> |

(b)

| Statement of Financial Position | | |
|--|------|---------------|
| | NOTE | \$ 000's |
| CURRENT ASSETS | | |
| Cash and cash equivalents | | 600 |
| Trade and other receivables | | 480 |
| Prepaid assets | | <u>450</u> |
| Total Current Assets | | 1 530 |
| NON-CURRENT ASSETS | | |
| Property, plant and equipment | (1) | <u>30 454</u> |
| Total Non-Current Assets | | 30 454 |
| Total Assets | | 31 984 |
| EQUITIES | | |
| CURRENT LIABILITIES | | |
| Current tax liability | | 2 600 |
| Trade and other payables | | 700 |
| Accrued expenses | | 290 |
| Overdraft | | <u>89</u> |
| Total Current Liabilities | | 3 679 |
| NON-CURRENT LIABILITIES | | |
| Long term borrowings | | <u>12 090</u> |
| Total Non-Current Liabilities | | 12 090 |
| Total Liabilities | | <u>15 769</u> |
| Net Assets | | 16 215 |
| EQUITY | | |
| Share capital | | 4 200 |
| Reserves | | 7 225 |
| Retained earnings | | <u>4 790</u> |
| Total Equity | (2) | 16 215 |

(c)

Notes to Accounts (extract)

| | \$ |
|--|------------|
| Share Capital | |
| 900 000 ordinary shares at \$3 each fully paid | 2 700 000 |
| 300 000 4% preference shares | 1 500 000 |
| | 4 200 000 |
| Dividends | |
| Recognised amounts | |
| Final dividend – previous financial year | 1 200 000 |
| Final ordinary dividend – current financial year | 650 000 |
| Final preference dividend – current financial year | 250 000 |
| | 4 790 000 |
| Property, Plant and Equipment | |
| Property | 28 000 000 |
| Revaluation of property | 90 000 |
| Total property | 28 090 000 |
| Plant and equipment (at cost) | 3 900 000 |
| Accumulated depreciation | 2 806 000 |
| Total plant and equipment | 1 094 000 |
| Office building (at cost) | 5 000 000 |
| Accumulated depreciation | 4 000 000 |
| Total office building | 1 000 000 |
| Vehicles (at cost) | 600 000 |
| Accumulated depreciation | 330 000 |
| Total vehicles | 270 000 |
| TOTAL property, plant and equipment | 30 454 000 |

8. *The Corporations Act is the principal legislation regulating companies in Australia. It regulates matters such as the formation and operation of companies, duties of company officers, and the raising of funds.*
9. *Powers of directors: manage the company and enter into transactions on its behalf.*

General duties of directors: *exercise powers and duties with the care and diligence that a reasonable person would have; in good faith in the best interests of the company; not to improperly use position to gain an advantage; not to improperly use information obtained through position. Duty to not trade while insolvent. Duty to keep books and records.*

Replaceable rules: *set of rules, known as replaceable rules, which govern the internal management of a company. A company can choose to have its own constitution, use the replaceable rules or use a combination of its own constitution and one or more of the replaceable rules.*

Prospectus: *overview of the company, detailed information about the proposed issue of securities.*

Rights of shareholders:

Ordinary shareholders

- *Hold the most common type of shares*
- *No specific rights to any dividends*
- *Voting rights at shareholders' meetings*
- *Last to receive payment if liquidation occurs.*

Preference shareholders

- Dividend at a fixed rate *before* ordinary shareholders
- Constitution may allow repayment of capital before ordinary shareholders if liquidation occurs
- No assumed right to attend and vote at AGM of shareholders.

10. *Corporate Social Disclosure expands the reporting of a business. The reporting responsibilities of a company have traditionally been in the area of accountability for financial performance, but all business activity has social and environmental costs and benefits. CSD is about the success or otherwise of the company efforts to contribute to economic development while improving the qualitative elements.*
11. *Criticisms of the use of CSD by Australian companies:*
- *Australian Accounting Standards are focused on the measurement of financial information and do not make provision for triple bottom line.*
 - *There is a lack of clear guidelines, resulting in a wide range of reporting methods.*
 - *Difficulty of verifying and/or auditing the information.*
12. *By using comparative information such as previous year's results, industry averages, competitor analysis and expected results. Ratio analysis can indicate the relative health of the company.*
13. *A KPI is used to measure and evaluate the success of decisions that are made by the company, or its Board of Directors. By setting appropriate performance indicators, the directors can measure the successful use of company resources to achieve the goals and mission of the company. Strategic planning should result in the determination of related strategies to achieve company goals, and these results can be measured with predetermined indicators. KPI's can be financial, or non financial.*
14. (a)

General Journal for Garland Industries

| DATE | DETAILS | DEBIT | CREDIT |
|--------|--|---------|---------|
| 2023 | | | |
| 4 Oct | Final Dividend Cash at Bank Payment of final dividend | 80 000 | 80 000 |
| 31 Dec | Cash at Bank Application Cash received from share issue | 150 000 | 150 000 |
| 2024 | | | |
| 6 Jan | Application Share capital Issue of 100 000 \$1.50 ordinary shares | 150 000 | 150 000 |
| 7 Jan | Share issue costs Cash at bank Payment of share issue costs | 15 000 | 15 000 |
| 7 Jan | Share capital Share issue costs Write off share issue costs | 15 000 | 15 000 |
| 21 Apr | General Reserve Share Capital Issue of 70 000 ordinary bonus shares at \$1.50 each | 105 000 | 105 000 |

(b)

Garland Industries – General Ledger (extract)

| Cash at Bank | | | | | |
|------------------------|-------------------|-----------|----------------|-------------------|-----------|
| 1 July | Balance b/d | 145 000 | 4 Oct | Final Dividend | 80 000 |
| 31 Dec | Application | 150 000 | 2024 7 Jan | Share Issue Costs | 15 000 |
| Final Dividend | | | | | |
| 4 Oct | Cash at Bank | 80 000 | | | |
| Application | | | | | |
| 6 Jan | Share Capital | 150 000 | 31 Dec | Cash at Bank | 150 000 |
| Share Capital | | | | | |
| 2024 | | | 2023 | | |
| 7 Jan | Share issue costs | 15 000 | 1 July | Balance b/d | 1 985 000 |
| | | | 2024 6 Jan | Application | 150 000 |
| 30 June | Balance c/d | 2 225 000 | 21 Apr | General Reserve | 105 000 |
| | | 2 240 000 | | | 2 240 000 |
| | | | 2024 1 July | Balance b/d | 2 225 000 |
| General Reserve | | | | | |
| 21 Apr | Share Capital | 105 000 | 1 July | Balance b/d | 185 000 |

15. *Multiple Choice – Select the most correct answer.*

- (i) *d*
(ii) *b*
(iii) *d*
(iv) *c*

16.

(a) *Workings*

| | |
|-----------------------------------|---------|
| <i>Cash and Cash Equivalents</i> | |
| <i>Cash on hand</i> | 14,000 |
| <i>Cash at bank</i> | 30,800 |
| <i>Short term deposits</i> | 89,600 |
| <i>Trade Receivables</i> | |
| <i>Accounts receivable</i> | 63,000 |
| <i>less Allowance for DD</i> | 3,080 |
| <i>Other Current Assets</i> | |
| <i>Prepaid insurance</i> | 46,200 |
| <i>Accrued income</i> | 784 |
| <i>Trade and other Payables</i> | |
| <i>Accounts payable</i> | 232,400 |
| <i>Debenture interest payable</i> | 1,537 |

Pyro
Statement of Financial Position (extract)
at 30 June 2024

CURRENT ASSETS

| | |
|-----------------------------|----------------|
| Cash and Cash Equivalents | 134,400 |
| Trade Receivables | 59,920 |
| Inventories | 93,800 |
| Other Current Assets | 46,984 |
| TOTAL CURRENT ASSETS | 335,104 |

CURRENT LIABILITIES

| | |
|----------------------------------|----------------|
| Trade and other payables | 233,937 |
| Current tax liability | 234,000 |
| TOTAL CURRENT LIABILITIES | 467,937 |

(b) Notes as at 30 June 2024

| Note 1 – Property Plant and Equipment | |
|---|-----------|
| Land at cost | 860,000 |
| Add: revaluation | 400,000 |
| | 1,260,000 |
| Buildings at cost | 420,000 |
| Plant and Equipment at cost | 336,000 |
| Accumulated depreciation on plant and equipment | (136,500) |
| Property, Plant and Equipment net book value | 1,879,500 |

| Note 2 – Share Capital | |
|--|---------|
| 800,000 shares @ \$1 less share issue costs \$14,500 | 785,500 |
| 100,000 shares @ \$2 | 200,000 |
| 250,000 shares @ \$2 less share issue costs \$25,000 | 475,000 |

| Note 3 – Dividends | |
|--|---------------|
| The following dividends were paid during the year: | |
| Final dividend @ 3 cents per share | 24,000 |
| Interim dividend @ 2 cents per share | 18,000 |
| | <u>42,000</u> |
| The directors have recommended final dividends for the year ending 30 June 2024: | |
| 1,150,000 ordinary shares @ 5 cents per share | 57,500 |

(c) **Workings:**

Final dividend 17/8/2023

$$800,000 \times .03 = 24,000$$

Bonus share issue 20/1/2024

$$100,000 \times \$2 = \$200,000$$

Interim dividend 1/3/2024

$$900,000 \times .02 = 18,000$$

Share issue

$$475,000 + 25,000 = 500,000 / 2$$

$$= 250,000 \text{ shares issued}$$

Pyro
Statement of Changes in Equity
for year ending 30 June 2024

| | SHARE CAPITAL | RETAINED EARNINGS | REVALUATION SURPLUS | GENERAL RESERVE | TOTAL EQUITY |
|---|---------------|-------------------|---------------------|-----------------|--------------|
| Balance at beginning | 785,500 | (149,000) | 360,000 | 58,000 | 1,054,500 |
| Changes in equity for the year | | | | | |
| Bonus Share issue | 200,000 | | (200,000) | | 0 |
| Share issue | 500,000 | | | | 500,000 |
| Share issue costs | (25,000) | | | | (25,000) |
| Dividends | | (42,000) | | | (42,000) |
| Total comprehensive income for the year | | 546,000 | 400,000 | | 946,000 |
| Transfer to/from General Reserve | | (40,000) | | 40,000 | 0 |
| Balance at end | 1,460,500 | 315,000 | 560,000 | 98,000 | 2,433,500 |

17.

Accounts Receivable

| | | | |
|-----------------|---------|-------------------------------------|---------|
| Opening Balance | 39 000 | <i>Cash Receipts from Customers</i> | 321 500 |
| Credit Sales | 325 000 | Closing Balance | 42 500 |
| | 364 000 | | 364 000 |

Cash sales 156000 (1) + bank 321500 (1) = 477500

Accounts Payable

| | | | |
|--------------------------------------|---------|-----------------|---------|
| <i>Cash purchases from Suppliers</i> | 129 300 | Opening balance | 25 700 |
| Closing Balance | 34 400 | Inventory | 138 000 |
| | 163 700 | | 163 700 |

Inventory

| | | | |
|---------------------------------------|---------|-----------------|---------|
| Opening balance | 95 000 | Cost of Sales | 130 000 |
| <i>Accounts Payable (cr purchase)</i> | 138 000 | Closing Balance | 103 000 |
| | 233 000 | | 233 000 |

Prepaid Insurance

| | | | |
|---------------------|-------|-------------------|-------|
| Opening Balance | 500 | Insurance Expense | 7 000 |
| <i>Cash at Bank</i> | 7 100 | Closing Balance | 600 |
| | 7 600 | | 7 600 |

Office Salaries Expenses

| | | | |
|---------------------|--------|-----------------|--------|
| <i>Cash at Bank</i> | 94 200 | Profit and Loss | 96 000 |
| Accrued closing | 1 800 | | |
| | 96 000 | | 96 000 |

94 200 + *Accrued opening* 1 600 = 95 800*Mortgage* 220200 – 121888 = 98312 *proceeds of mortgage*

Schedule of cash paid to suppliers and employees:

| | |
|-----------------------------|-----------|
| Accounts Payable | 129,300 |
| Office Salaries | 95,800 |
| Retail Store Expenses | 21,000 |
| Marketing Expenses | 11,000 |
| Sales Salaries | 63,000 |
| General Expenses | 10,000 |
| Insurance Expense | 7,100 |
| Office Operational Expenses | 16,400 |
| | \$353,600 |

Plant and Equipment

| | | | |
|---------------------------|---------|-----------------|---------|
| Opening balance | 67 000 | SoA | 52 000 |
| Purchase of new Equipment | 74 000 | Closing Balance | 89 000 |
| | 141 000 | | 141 000 |

Accumulated Depreciation on Plant and Equipment

| | | | |
|-----------------|--------|---------------------|--------|
| Sale of P&E | 35 500 | Opening Balance | 46 000 |
| Closing Balance | 23 000 | Depreciation on P&E | 12 500 |
| | 58 500 | | 58 500 |

Sale of Plant and Equipment

| | | | |
|---------------------|--------|-------------------------|--------|
| Plant and Equipment | 52 000 | Accumulated Depn on P&E | 35 500 |
| Gain on Sale of P&E | 9 750 | Cash Proceeds from Sale | 26 250 |
| | 61 750 | | 61 750 |

Retained Earnings

| | | | |
|-----------------|--------|-----------------|--------|
| General Reserve | 20 000 | Opening Balance | 25 600 |
| Dividends | 40 228 | Profit and Loss | 71 628 |
| Closing Balance | 37 000 | | |
| | 97 228 | | 97 228 |

Davis Inc
Cash Flow Statement

Cash Flows from Operating Activities

| | |
|---|---------------|
| Cash Receipts from Customers | 477,500 |
| Cash Paid to Suppliers and Employees | (353,600) |
| Cash generated from operations | 123,900 |
| Interest Paid | (16,200) |
| Income Tax Paid | (23,100) |
| Net Cash flows from Operating Activities | 84,600 |

Cash Flows from Investing Activities

| | |
|---|-----------------|
| Proceeds from Sale of Plant and Equipment | 26,250 |
| Dividends Received | 4,210 |
| Interest Received | 2,680 |
| Purchase of Plant and Equipment | (74,000) |
| Net Cash flows from Investing Activities | (40,860) |

Cash Flows from Financing Activities

| | |
|----------------------|--------|
| Issues of Debentures | 85,000 |
|----------------------|--------|

Davis Inc
Cash Flow Statement *continued*

| | |
|---|-----------------|
| Payment of Mortgage | (98,312) |
| Dividends Paid | (40,228) |
| Net Cash flows from Financing Activities | (53,540) |
| Net decrease in Cash held during the year | (9,800) |
| Cash and Cash Equivalents at Start of Period | 16,200 |
| Cash and Cash Equivalents at End of Period | 6,400 |

CHAPTER 8: RATIOS

1. Ratio analysis is used to evaluate profitability, liquidity and leverage. eg. To decide if the company is generating a return from its investment in assets or equity, or to compare profit made with the assets or equity of the business.
2. **Liquidity:** The ability of the company to pay all debts on the date they fall due.
Profitability: The company's ability to generate a return from its investment in assets or equity. Profit may be high because the company due to non-cash items such as high credit sales – cash flow can still be low thus liquidity might be poor.
3. If a business is highly geared, then it has a high proportion of externally generated debt, resulting in the requirement to pay high levels of interest to external stakeholders.
4.
 - (a) Profit ratio = 18%
 - Rate of return on assets = 6.9%
 - Working capital = 74%
 - Quick asset ratio = 32%
 - Debt to equity = 239%
- (b) Profitability is remaining stable. Liquidity has improved through it still is not close to the ideal of 200%. Leverage is worsening and more external debts are creeping in.
- (c) Selling expenses more closely align with staffing costs, whereas marketing is related to the external promotion of product. Staffing costs are more difficult to affect quickly, whereas changes to external promotion can be made in response to any concern about ratio results.
- 5.

| YEAR | 2026 | 2027 |
|----------------|------|------|
| Current | 691% | 569% |
| Quick asset | 108% | 106% |
| Debt to equity | 192% | 136% |

Advice:

While the current ratio appears to be extremely strong, the quick ratio reveals that the business actually could have a liquidity problem. It appears that the business has invested in a lot of stock, not generally recommended for a food business.

The leverage has decreased, though it is still of concern. While the business might want to finance renovations through a loan it is probably better for the owners to invest in order to lessen the interest payment burden – also to consider reducing stock.

6. *Limitations include:*

- *Historical cost accounting.*
- *Lack of comparability between entities.*
- *Lack of disclosure.*

7. *Aid Pharmaceuticals*(a) *Earnings per share = 46 cents**Price/Earnings = 1.09 times**Dividend yield = 55%*(b) *Dividend yield shows how much is being paid out in dividends relative to the share price, so it shows how much cash flow is being received by the investor for each dollar they have invested.*8. *Debtor's collection period = 85 days**Stock turnover = 8 times per year = 45 days.*9. *Shelly Ltd*

$$(a) \text{ Current Assets/ Current Liabilities} = \frac{10\,900 + 43\,700 + 36\,500}{19\,800 + 6\,790}$$

$$= 3.43: 1 \text{ or } 343\%$$

$$(b) \text{ Debtor's Collection} = \frac{(45\,000 + 43\,700)/2 \times 365}{980\,000}$$

$$= 16.5 \text{ days}$$

$$\text{Inventory Turnover} = \frac{660\,000}{(36\,500 + 35\,700)/2}$$

$$= 18.3 \text{ times}$$

$$(c) \text{ Profit after Tax/ Revenue} = 85\,350/980\,000$$

$$= 8.7\%$$

$$(d) \text{ Earnings per share} = \frac{85\,350}{(55\,000/0.55)}$$

$$= \$0.85 \text{ per share}$$

$$\text{Price/earnings ratio} = 1.33$$

$$0.85$$

$$= 1.56 \text{ times}$$

(e) **Interpretation:**

Efficiency ratios very good, with debtors usually paying in just over two weeks and inventory being turned over quickly – these ratios are most likely to be used by internal stakeholders such as directors and managers.

Market ratios reflect an acceptable earnings per share but quite low price/earning ratio showing the market does not believe Shelly Ltd is necessarily going to have high growth potential – these ratios are most likely to be used by external stakeholders such as investors and shareholders.

10.

| RATIO | | 2024 |
|--|--|------------|
| Profit Ratio <i>Profit after Tax</i> <i>Total Revenue (net sales)</i> | $\frac{2\ 100}{20\ 000}$ | 10.50% |
| Rate of return on assets <i>Profit before income tax + interest expense</i> <i>Average total assets</i> | $\frac{3\ 000 + 300}{29\ 800 + 25\ 000/2}$ | 12.04% |
| Times interest earned <i>Profit before income tax + interest expense</i> <i>Interest costs (expenses and capitalised)</i> | $\frac{3\ 300}{300}$ | 11 times |
| Inventory Turnover <i>Cost of Sales</i> <i>Average Cost of Inventory</i> | $\frac{16\ 400}{3\ 500 + 4\ 000/2}$ | 4.37 times |
| Debtors Collection Period <i>Average Debtors</i> × $\frac{365}{1}$ <i>Net Credit Sales</i> | $\frac{1\ 500 + 3\ 000}{20\ 000} \times \frac{365}{1}$ | 41.06 days |
| Working Capital <i>Current Assets</i> <i>Current Liabilities</i> | $\frac{13\ 800}{8\ 900}$ | 155.06% |
| Quick Asset <i>Current assets</i> <i>(excluding inventory and prepayments)</i> <i>Current liabilities (excluding bank overdraft)</i> | $\frac{3\ 000 + 6\ 000}{8\ 900 + 2\ 500}$ | 140.62% |
| Debt to Equity <i>Total Liabilities</i> <i>Equity (End)</i> | $\frac{12\ 900}{16\ 900}$ | 76.33% |
| Earnings Per Ordinary Share <i>Profit after tax – preference dividends</i> <i>Weighted average number of ordinary shares</i> | $\frac{2\ 100}{8\ 000 (4\ 000 \times 50 \text{ cent shares})}$ | \$0.26 |
| Price/Earnings <i>Market price per ordinary share</i> <i>Earnings per ordinary share</i> | $\frac{\$1.50}{\$0.26}$ | \$5.77 |
| Dividend Yield <i>Annual Dividend per ordinary share</i> <i>Market price per ordinary share</i> | $\frac{1\ 050/8\ 000}{\$1.50}$ | 8.75% |

SOLUTIONS TO TRIAL TESTS



TT 1: Theory and Cash Budgeting

Section 1: Multiple Choice

1. *d* 2. *c* 3. *c* 4. *d* 5. *d* 6. *b*
 7. *c* 8. *a* 9. *b* 10. *c* [10 marks]

Section 2: Practical Question Answers

1.

| | Total Sales | APRIL | | MAY | | JUNE | |
|--------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | Cash | A/c Rec | Cash | A/c Rec | Cash | A/c Rec |
| Jan | 120 000 | | | | | | |
| Feb | 90 000 | | 9 000 | | | | |
| Mar | 104 000 | | 20 800 | | 10 400 | | |
| Apr | 108 000 | 75 600 | | | 21 600 | | 10 800 |
| May | 97 000 | | | 67 900 | | | 19 400 |
| Jun | 125 000 | | | | | 87 500 | |
| TOTAL | | 75 600 | 29 800 | 67 900 | 32 000 | 87 500 | 30 200 |

**Halle Trinity Cupcakes
CASH BUDGET
for the 3 months Apr-Jun 2025**

| | APR | MAY | JUN |
|--------------------------------|---------|---------|---------|
| Cash bal at beg | (100) | 12 300 | 28 800 |
| <u>Add estimated receipts</u> | | | |
| Cash Sales | 75 600 | 67 900 | 87 500 |
| Cash from A/c Rec | 29 800 | 32 000 | 30 200 |
| Proceeds sales Oven | | 7 000 | |
| Total cash available | 105 300 | 119 200 | 146 500 |
| <u>Less estimated payments</u> | | | |
| Pay to A/c Pay | 60 000 | 60 000 | 65 000 |
| Purchase Oven | | 5 000 | 25 000 |
| Insurance Oven | | 500 | |
| Rent | 9 000 | | |
| Wages | 20 000 | 20 000 | 19 200 |
| Advertising | | 2 400 | |
| Electricity | 2 000 | | |
| Loan repayment (inc interest) | 2 000 | 2 000 | 2 000 |
| Drawings | | 500 | |
| Total payments | 93 000 | 90 400 | 111 200 |
| Cash bal at end | 12 300 | 28 800 | 35 300 |

2.

| HALLE TRINITY CUPCAKES BUDGETED INCOME STATEMENT for the quarter ended 30 June 2025 | | |
|---|--------------|----------------|
| Sales | | 330 000 |
| Less Cost of Sales | | <u>185 000</u> |
| GROSS PROFIT | | 145 000 |
| Add other income | | |
| Gain on sale of oven | | <u>3 000</u> |
| | | 142 000 |
| Less expenses | | |
| Depreciation Oven | 1 000 | |
| Insurance Oven | 200 | |
| Rent | 9 000 | |
| Wages | 60 000 | |
| Advertising | 2 400 | |
| Electricity | 3 000 | |
| Interest on loan | <u>1 200</u> | <u>76 800</u> |
| Profit | | <u>65 200</u> |

3. Halle has \$35 300 cash in the bank at the end of June. In addition to this she is making a profit in her current store. While more information would be needed to do a break even analysis it could be a safe investment to open the shop next door as she has sufficient funds to pay for the start up expenses and it could be assumed that some income would be earned.

TT 2: Capital Budgeting

Section 1: Multiple Choice

1. c 2. b 3. d 4. d 5. c 6. b
7. c 8. a 9. c 10. b [10 marks]

Section 2: Practical Question Answers

1. a)
i) Cost of machinery $\$300\,000 + \$250 + \$2500 = \$302\,750$.
Payback = $\$302750/65000$
Payback = 4.657 years
Payback = 4 years and 8 months.
ii) Based on the payback method this is not an acceptable investment as it takes 8 months longer than the required 4 years to pay off.
- b)
i) NPV = PV of Cash Flows – PV of investment
NPV = $65000 \cdot [10\%]^{15} + 80000/(1.10)^{15} - \$302\,750$
NPV = $65\,000(7.6061) + 80\,000(0.2394) - \$302\,750$
NPV = $494\,396.5 + 19\,152 - 302\,750$
NPV = 210 798.50
ii) Yes, the investment can be accepted as the NPV is a positive amount.
- c)
i) **Consumer preferences** – it is crucial to consider customers preferences as they are the main source of income.
ii) **Competition** – The competition is an important factor and must be considered because as in any industry a business must keep up with or keep ahead of competitors.
iii) **Government regulations** – A business must operate within the law and regulations set by the government and thus it must make sure that no laws or government policy will be broken, e.g. cannot invest in machinery that will pollute above the legal allowable limits.

Section 2: Practical Question Answers

$$\begin{aligned}
 1. \quad a) \quad \text{Debt to equity} &= 332\,000 \\
 &= (590\,000 - 332\,000) \\
 &= 127\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Earnings per share} &= \frac{600\,000 - (0.02 \times 2\,000\,000)}{(1500\,000 \times 6/12) + (2000\,000 \times 6/12)} \\
 &= 32 \text{ cents per share}
 \end{aligned}$$

$$\begin{aligned}
 \text{Price/earnings ratio} &= \frac{1.00}{0.32} \\
 &= 3.1 \text{ times}
 \end{aligned}$$

$$\begin{aligned}
 \text{Dividend yield} &= \frac{500\,000}{2\,000\,000} \\
 &= 1.00 \\
 &= 25\%
 \end{aligned}$$

2.

- a) The current ratio has increased over time. The quick ratio has not changed by a large amount, indicating it is likely that the improvement in liquidity came from an increase in stock. Both ratios are close to the industry average.
- b) Stock turnover is increasing, which is a concern given that this business's main item of sale is fresh food. The decreasing debtor's collection shows that there is no problem collecting money owed to the company, however the time taken for inventory turnover would indicate that inventory is not being sold quickly enough.
- c) Profitability is remaining stable, and similar to industry expectations.

TT 5: Companies

Section 1: Multiple Choice

1. d 2. d 3. d 4. b 5. d 6. b
 7. a 8. c 9. a 10. c [10 marks]

Section 2: Practical Question Answers

1. a) General Journal (extract)

| DATE | DETAILS | DEBIT | CREDIT |
|---------|---|---------|---------|
| 2017 | | | |
| 1 July | Share Trust Fund Application Receipt of application money for 100 000 ordinary shares | 500 000 | 500 000 |
| 31 July | Cash at bank Share Trust Fund Transfer of application money into cash at bank. | 500 000 | 500 000 |
| 10 June | Application Share capital Transfer from application into capital. | 500 000 | 500 000 |
| | Share capital Cash at bank Payment of share issue costs | 200 000 | 200 000 |

b)

| Retained Earnings | | | |
|--------------------------|---------|-------------|---------|
| Balance b/d | 0 | Profit | 160 000 |
| Dividend payable – Final | 10 000 | | |
| General Reserve | 20 000 | | |
| Balance b/d | 130 000 | | |
| | 160 000 | | 160 000 |
| | | Balance c/d | 130 000 |

Section 3: Extended Answer

[16 marks]

Corporate social disclosure

Corporate Social Disclosure is different to mandatory corporate disclosure. The reporting responsibilities of a company have traditionally been in the area of accountability for financial performance, but all business activity has social and environmental costs and benefits. This is about the success or otherwise of the company efforts to contribute to economic development while improving the qualitative elements.

Sustainability reporting involves companies demonstrating their corporate responsibility through measuring and publicly reporting on their economic, social and environmental performance and impacts. It can be delivered through the company's annual report, a stand alone sustainability report, a triple bottom line report or an environmental or social impact report.

Evaluation of reasons to produce a CSD report

- *management of business risk*
- *employee relations*
- *ethics*
- *public reputation*
- *competitive advantage*

Difficulties of producing social and environmental information

- *Australian Accounting Standards are focused on the measurement of financial information and do not make provision for triple bottom line*
- *No specific requirements*
- *Lack of clear guidelines resulted in a wide range of reporting methods*
- *Difficulty of verifying the information*
- *Requires the investment of resources and training of staff*

Purpose of key performance indicators

- *Used to measure and evaluate the success of decisions that are made by the company, or its Board of Directors.*
- *By setting appropriate performance indicators, the directors can measure the successful use of company resources to achieve the goals and mission of the company.*
- *Strategic planning should result in the determination of related strategies to achieve company goals, and these results can be measured with predetermined indicators.*
- *KPI's can be financial, or non financial.*

TT 6: Reporting

Section 1: Multiple Choice

1. *b* 2. *d* 3. *a* 4. *b* 5. *c* 6. *a*
 7. *b* 8. *b* 9. *d* 10. *a*

[10 marks]

Section 2: Practical Question Answers

1.

| Seaview Resorts | |
|---|--------------|
| Statement of Financial Position | |
| | \$ 000's |
| CURRENT ASSETS | |
| <i>Cash and cash equivalents</i> | 150 |
| <i>Trade and other receivables</i> | 1250 |
| <i>Inventories</i> | 18500 |
| <i>Non-current assets held for sale</i> | 10 |
| Total Current Assets | 19910 |
| NON-CURRENT ASSETS | |
| <i>Investments</i> | 65 |
| <i>Property, plant and equipment</i> | 10600 |
| <i>Intangible assets</i> | 55 |
| <i>Other non-current assets</i> | 1300 |
| Total Non-Current Assets | 12020 |
| Total Assets | 31930 |
| EQUITIES | |
| CURRENT LIABILITIES | |
| <i>Current tax liability</i> | 13 |
| <i>Trade and other payables</i> | 11450 |
| <i>Short term loans</i> | 1700 |
| Total Current Liabilities | 13163 |
| NON-CURRENT LIABILITIES | |
| <i>Long term borrowings</i> | 7560 |
| <i>Mortgage</i> | 5600 |
| Total Non-Current Liabilities | 13160 |
| Total Liabilities | 26323 |
| Net Assets | 5607 |
| EQUITY | |
| <i>Share capital</i> | 4280 |
| <i>Reserves</i> | 37 |
| <i>Retained earnings</i> | 1290 |
| Total Equity | 5607 |

2. (a) *Property, plant and equipment*

| | \$ |
|-----------------------------|------------------|
| Land | |
| At fair value | <u>5 000 000</u> |
| Total land | 5 000 000 |
| Resort Buildings | |
| At cost | 6 600 000 |
| Accumulated depreciation | <u>1 000 000</u> |
| Total buildings | 5 600 000 |

(b) *Dividends*

Dividends recognised in the current year:

| Percentage | Total amount | |
|----------------|--------------|---------------|
| Final Ordinary | 2% | <u>80 000</u> |

Dividends proposed by the directors for the next period:

| Percentage | Total amount | |
|------------------|--------------|---------------|
| Final Preference | 6% | <u>16 800</u> |

Section 3: Extended Answer

1. **Financial Reporting Council (FRC)**

The FRC is the peak body responsible for overseeing the effectiveness of the financial reporting framework in Australia. It is a statutory body under Part 12 of the ASIC Act.

Main functions:

- *oversight of the accounting and auditing standards setting processes for the public and private sectors,*
- *strategic advice in relation to the quality of audits conducted by Australian auditors,*
- *advise the Minister on these and related matters to the extent that they affect the financial reporting framework in Australia,*
- *monitor the development of international accounting and auditing standards,*
- *work to further the development of a single set of accounting and auditing standards for world-wide use and promote the adoption of these standards.*

2. **Australian Securities and Investment Commission (ASIC)**

- *ASIC is Australia's corporate, markets and financial services regulator. ASIC contributes to Australia's economic reputation and wellbeing by ensuring that Australia's financial markets are fair and transparent and supported by confident and informed investors and consumers. ASIC is an independent Australian government body set up under and administering the ASIC Act and carries out most of its work under the Corporations Act.*

Main functions:

- *promote confident and informed participation by investors and consumers in the financial system*
- *administer the law effectively and with minimal procedural requirements*
- *enforce and give effect to the law*
- *efficiently and quickly receive, process and store information that is given to them*
- *make information about companies and other bodies available to the public as soon as practicable.*
- *ASIC regulates Australian companies, financial markets, financial services organisations and professionals who deal and advise in investments, superannuation, insurance, deposit taking and credit.*

3. **Australian Accounting Standards Board (AAS)**

- *The AASB is an independent accounting standards organisation based in Melbourne. The board comprises 13 members. The Chairman is appointed by the Australian government by the Minister for Superannuation and Corporate Law.*

Purpose:

- *To develop a conceptual framework for the purpose of evaluating proposed accounting standards*
- *Develop and issue accounting standards that have the force of the law*
- *Formulate accounting standards for other purposes*
- *Participate and contribute to the development of a single set of accounting standards for worldwide use.*

Australian Securities Exchange (ASX)

- *Public companies in Australia with their shares listed on the securities exchange must comply with the listing requirements of the ASX.*

The Listing Rules require listed companies to provide to the ASX:

- *Half-yearly reports.*
- *A preliminary final statement.*
- *Additional details to the annual report.*
- *Additional details for mining exploration companies.*
- *Any other information that is likely to have an impact.*
- *If companies do not comply with these listing rules, they are likely to be delisted so that their shares can no longer be traded on the securities exchange.*

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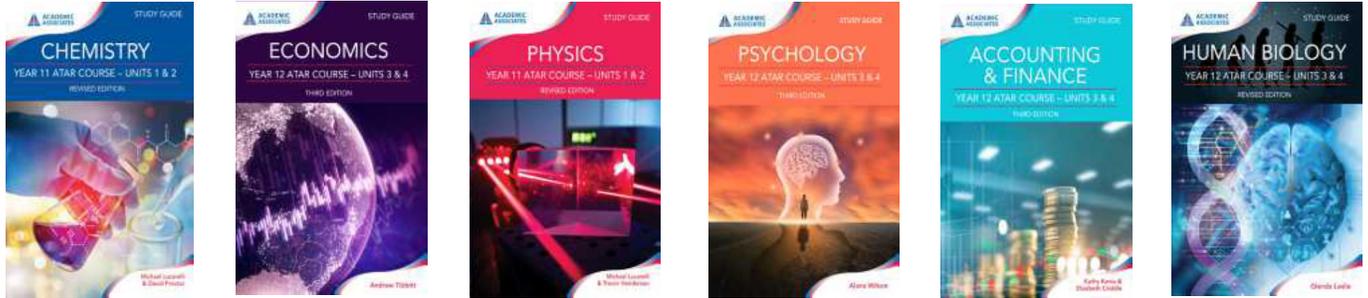


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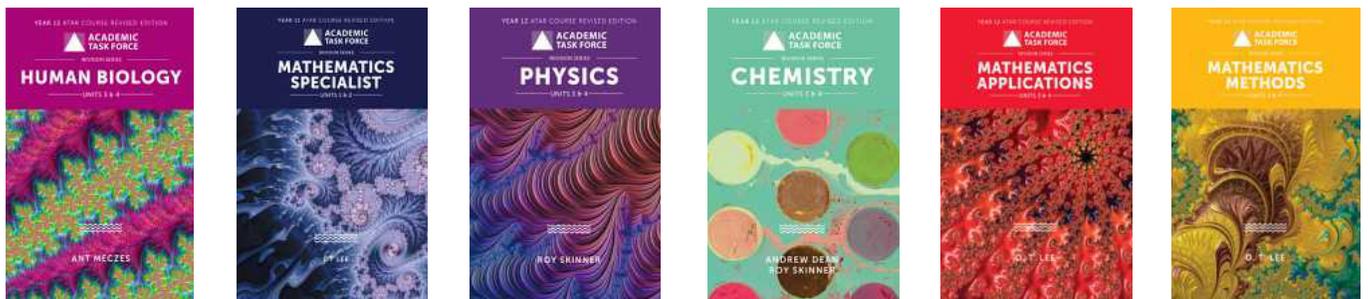
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