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ACCOUNTING AS  
LEVEL NOTES 9706

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ADEEL PAPERWALA

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# 1 Financial Accounting

## 1.1 The accounting cycle

- ❖ *explain & apply the principles of the double entry system to record business transactions*
  - **Accounting system**: a system of collecting, storing & processing financial information & accounting data used by managers.
  - **Double-entry bookkeeping**: a system of recording accounting transactions that recognises that there are two sides / aspects to every transaction.
    - All transactions have a dual aspect.
    - Every debit entry in an acc. in the ledger must have a corresponding credit entry.
    - Every credit entry in an acc. in the ledger must have a corresponding debit entry.
  
- ❖ *apply the accounting equation*
  - **Assets** = *Capital + Liabilities*
  - **Assets**: something which is owned by / owed to a business
  - **Capital**: initially the amount of money invested in the business by the owner. After the first trading period, it is adjusted by the profit for the year less any drawings plus any additional capital contributed. It is the net amount which the business owes to the owner
  - **Liabilities** – the amount of money owing to people outside the business for the use of their resources
  
- ❖ *describe the functions of the books of prime entry*
  - **Book of prime entry**: a book used to list all transactions of a similar nature before they are posted to the ledger. There are six books of prime entry:
    - **Purchases journal** – used to enter amounts owed to creditors of stock upon the receipt of an invoice (credit purchases). Factors that business should consider before changing its supplier:
      - **Quality** – will the product quality be the same?
      - **Price** – is the new supplier likely to offer a lower price?
      - **Credit terms** – will the new supplier offer the same credit terms?
      - **Reliability** – is the supplier reliable?
      - **Delivery** – will the supplier offer delivery?
    - **Purchases returns journal** – used to enter all returns back out of the firm to creditors of stock upon the receipt of a credit note
      - \* **Debit Note** is issued by the purchaser, at the time of returning the goods to the vendor, & the vendor issues a **Credit Note** to inform that he/she has received the returned goods.
    - **Sales journal** – used to enter amounts owed by debtors of stock upon the issue of an invoice (credit sales)
    - **Sales returns journal** – used to enter all returns into the firm back by debtors of stock upon the issue of a credit note
    - **General journal** – used when we cannot comfortably find another book of prime entry to use. It is used to record:
      - Purchase of NCA on credit
      - Sale of NCA on credit
      - Entries necessary to open ledger acc. when a business first comes into existence
      - Entries required to record the closing of ledger acc. when a business finally ceases to trade
      - Correction of errors
    - **Cash book** – used to record *all* transactions concerning money (cash, cheques, debit & credit card transactions); it also acts as a *ledger*.
  - All transactions *must* be entered in one of the books of prime entry before they can be entered in the ledger.
  - They are used as convenient way of entering transactions into the double-entry system
  - It is less efficient (time consuming & costly) to make entries into the ledgers as they arise.
  - It is better to collect the entries & categorise them into bundles of similar types & then post them from these books in bulk.
  - They are not part of double-entry bookkeeping except cash book.

❖ describe the limitations & benefits of the books of prime entry

Benefits	Limitations
Helps guard against errors / fraud	bulky & voluminous
It enables checking transactions through the use of a TB & control acc.	information in scattered form (not according to acc.)
It shows the amount due to individual customers & suppliers thus avoiding overpayment	time consuming, each entry has to be posted to individual ledger
It enables the production of the IS & SOFP to be compiled more easily.	may involve repetitive work as business may have similar transactions

❖ prepare ledger acc. & TB

- **Ledger acc.:** a history of all transactions of a similar nature
- **Ledger:** a book containing acc.
- **Debit side:** left-hand side of an acc.
- **Credit side:** right-hand side of an acc.
- **Golden rule:** for every debit entry in a ledger acc. there must be an equal credit entry in another ledger acc.

Dr	An acc. / ***** acc.	Cr
Receives / Gains		Gives / Loses

- **Six types of error are not revealed by extracting the TB:**
  - **Commission** – the correct amount is entered on the correct side of an incorrect acc. of the same class: e.g., rent debited to the local taxes acc.
  - **Reversal of entries** – entries are made on the wrong side of both acc.: e.g., cash sales debited to sales acc. & cash credited to cash acc.
  - **Omission** – there is no record of a transaction in the system: e.g., goods are purchased & the supplier's invoice is mistakenly destroyed before the transaction has been entered in the purchases book.
  - **Principle** – a transaction is entered in the wrong class of acc.: e.g., vehicle repairs are entered as capital expenditure in a vehicles acc.
  - **Original entry** – an incorrect amount is entered in the book of prime entry: e.g., a purchase invoice for \$345 is entered in the purchases journal as \$435.
  - **Compensating** – errors cancel each other out: e.g., the debit side of one (/ more) acc.(s) is overcast by \$1000; other totally unrelated acc. have credits that are also overcast by \$1000.

❖ apply the accounting concepts underpinning the preparation of acc.

- **Accounting principles:** basic rules that are applied in recording transactions & preparing financial statements. They are also known as concepts.
  - **Business entity** – every business is regarded as having an existence separate from that of its owner, thus only the transactions of the business should be recorded & *not* the owner's private transactions.
  - **Historic cost:** transactions are recorded at their cost to the business.
  - **Money measurement** – only transaction that can be expressed in monetary terms are recorded in ledger
  - **Going concern:** when there is no intention to discontinue a business in the foreseeable future. Unless stated to the contrary, it is assumed that the acc. of the business are prepared on a going concern basis
  - **Consistency:** transactions of a similar nature should be recorded in the same way (that is, consistently) in the same accounting period & the future accounting periods.
  - **Prudence/conservation:** profits & assets should not be overstated & losses should be provided for as soon as they are recognised.
  - **Realisation:** revenue is recognised / accounted for by the seller when it is earned whether cash has been received from the transaction / not.
  - **Duality:** this recognises that there are two aspects for each transaction – represented by debit & credit entries in acc.
  - **Materiality** – recognises that some types of expenditure are less important in a business context than others & the business should not waste time recording transactions that involve small amounts of money

- **Matching/Accrual** – the IS should only include the income earned & expenses incurred for the current financial year.
- **Substance over form**: the economic substance of the transaction must be recorded in the financial statements rather than its legal form in order to represent a true & fair view of the affairs of the business.

## 1.2 Accounting for NCA

### ❖ *distinction between & treatment of capital & revenue incomes & expenditures*

- **Capital expenditure**: money spent on acquiring NCA; expenditure on NCA w/ an expected life of more than 12 months
- **Revenue expenditure**: the day-to-day expenditure incurred in the day-to-day running of a business
- **Capital income**: money earned from the sale of NCA
- **Revenue income**: the day-to-day income earned from the sale of inventories / the provision of a service

### ❖ *purpose of accounting for depreciation & the application of relevant accounting concepts in respect of NCA.*

- **Depreciation**: the apportioning of the cost of a NCA over its useful economic life  
: the systematic allocation of the depreciable amount of an asset over its useful life
- The total cost of a NCA is never charged to the IS for the year in which it was purchased. The cost is spread all over the years that it is used in order to reflect the IS cost of using the asset in that particular financial year.
- **Matching concept** – the cost of using NCA to earn revenue should be matched in the IS to the revenue earned in the same period.
- **Prudence concept** – if the cost of using NCA was not included in the IS, profit would be overstated, & so w/ NCAs in the SOFP
- **Consistency concept** – same depreciation method should be used in future years once adopted to allow valid comparisons.

### ❖ *causes of depreciation*

- **Wear & tear** – assets become worn out through use
- **Obsolescence** – assets have to be replaced because new, more efficient technology has been developed / machines which were acquired for the production of particular goods are of no further use because the goods are no longer produced.
- **Technological advance**
- **Passage of time** – an asset required for a limited period of time, i.e. the lease of premises for a given number of years, loses value as time passes.
- **Depletion/using up/exhaustion** – e.g. mines, quarries & oil wells depreciate as the minerals/resources are extracted from them.
- **Economic reasons**

### ❖ *calculate depreciation using the reducing balance, straight-line & revaluation methods*

- **Net book value / written-down value/ carrying amount**: the cost of a NCA minus the accumulated depreciation
- **Net book value** = *historic cost – accumulated depreciation*
- **Straight-line depreciation**: when the total depreciation is spread evenly over the useful life of the non-current asset
- **Straight line depreciation** =  $\frac{\text{cost} - \text{residual value}}{\text{estimated useful life in years}} / \text{annual\%} \times \text{historic cost}$
- **Reducing-balance depreciation**: depreciation is calculated as a fixed percentage of the net book value of the asset each year.
- **Reducing balance depreciation** =  $\text{annual\%} \times \text{net book value}$
- **Revaluation method of depreciation**: used to calculate the cost of consumption in the accounting period of small NCA i.e. power tools

❖ evaluate the most appropriate method of calculating depreciation

- The **straight-line method** should be used for assets that are expected to earn revenue evenly over their useful working lives, / those whose value will decline gradually over their useful lives. It is also generally used where the pattern of an asset's earning power is uncertain. It should always be used to write off the costs of assets w/ fixed lives, i.e. leases.
- The **reducing-balance method** should be used when it is considered that an asset's earning power will diminish as the asset gets older / when the asset loses more of its value in the early years of its life (e.g. a car / delivery vehicle)
  - Provides a more realistic charge against profits (1) as some assets lose more value in their first years (1)/as the asset reduces in value so the depreciation charge reduces (1).
  - Is more complicated to calculate (1) as the charge changes each year because it is based on the decreasing net book value at the beginning of each year (1) rather than the more straightforward equal charge per year when using the straight-line method (1).
- **Why is reducing balance method more appropriate for assets i.e. computer equipment?**
  - Computer equipment tends to fall in value more in the early years. (1) They lose value very quickly due to obsolescence/ technological changes. (1) The reducing balance method depreciates the assets more in the earlier years & less in later years (1) which matches the fall in value of computer equipment (1).
  - The straight-line method of depreciation depreciates assets at the same amount each year (1) which does not match the rapid loss in value. (1)
- The **revaluation method** should be used for NCA that are difficult to keep track of, e.g. loose tools.
- **Why is the revaluation method of depreciation appropriate for assets i.e. loose tools?**
  - It is not worthwhile keeping individual records of loose tools (1) as they are usually many small value items (1) & are difficult to keep track of. (1) They are easily broken, damaged / lost & have to be regularly replaced. (1)
  - The individual tools may not cost enough to treat them as separate assets
  - Each tool may have a different useful life.
  - However, their total value may be quite large.

❖ prepare ledger acc. & journal entries for NCA, depreciation & disposal (including entries for part exchange)

Dr		Machinery account		Cr	
		\$			
1 Jan 2012	Bank	64000			

Dr		Provision for depreciation of machinery account		Cr	
		\$		\$	
31 Dec 2012	Balance c/d	12800	31 Dec 2012	Income statement	12800
		12800			12800
31 Dec 2013	Balance c/d	23040	1 Jan 2013	Balance b/d	12800
		23040	31 Dec 2013	Income statement	10240
					23040
			1 Jan 2014	Balance b/d	23040



- **There are a number of uses of a bank reconciliation statement:**
  - To identify errors in the cash book (1)
  - To identify errors on the bank statement (1)
  - To identify uncleared lodgements (1)
  - To identify unrepresented cheques (1)
  - To verify accuracy of accounting records (1)
  - To update the cash book w/ transactions only on the bank statement (1)
  - To identify out of date cheques (1)
  - They reveal the correct amount of the cash at bank. W/out reconciliation, the cash book & bank statement balances may be misleading.
  - They ensure that the correct bank balance is shown in the SOFP.
  - **They are an important system of control:**
    - Unintended overdrawn on the bank acc. can be avoided
    - A surplus of cash as bank can be highlighted & invested to earn interest
    - If reconciliations are prepared regularly, errors are discovered early.

❖ *prepare a bank reconciliation statement from relevant information*

- **Step 1: Compare the entries in the cash book w/ the bank statements** – tick the items that appear in both the cash book & the bank statement, be sure to tick them in both the places.
- **Step 2: enter in the cash book any items that remain unticked in the bank statement** – then tick those items in both places & calculate the new cash book balance.
- **Step 3: prepare the reconciliation statement** – begin w/ the final balance shown on the bank statement & adjust it for any items that remain unticked in the cash book, the result should then equal the balance in the cash book.

Bank reconciliation at ... (the date when the reconciliation is prepared)

Balance at bank as per cash book

Add Unrepresented cheques

Less Lodgements not yet credited by the bank

Balance at bank as per the bank statement ... (date)

Balance at bank as per bank statement

Less unrepresented cheques

Add lodgements not yet credited

Balance at bank as per cash book

❖ *prepare ledger acc. & journal entries to correct errors using a suspense acc. & record the effects of these in the financial statements*

- **Suspense acc.:** an acc. opened to record a difference between the debit & credit totals of the TB.
  - A temporary acc. used to balance the TB
  - Used to help correct errors when TB does not balance

General journal		
	Dr	Cr
	\$	\$
Motor expenses account	1700	
Vehicles account		1700
Error of principle: Motor expenses included as capital expenditure		
Suspense account	32 640	
Sales account		16 320
Purchases account		16 320
Posting error: Sales posted incorrectly to purchases account		
Suspense account	8 000	
Rent receivable account		4 000
Rent payable account		4 000
Posting error: Rent receivable entered incorrectly in the rent payable account		
Drawings account	4 700	
Purchases account		4 700
Posting error: Drawings entered as purchases		

Dr	Suspense account		Cr
	\$		\$
Sales account	16320	Trial balance difference	40640
Purchases account	16320		
Rent receivable account	4000		
Rent payable account	4000		
	<u>40640</u>		<u>40640</u>

❖ *prepare sales & purchase ledger control acc.*

- **Control acc.:** contains the totals of all postings made to the acc. in a particular ledger.
- The totals are the periodic totals of the books of prime entry from which postings are made to the ledger.
- The balance on a control acc. should equal the total of the balances in the ledger it controls

Purchase ledger control acc.	
Debit	Credit
Balance b/d (if any)	Balance b/d (usually here)
Purchases returns / returns outwards (purchase returns journal)	Credit purchases (purchases journal)
Cash paid (cash book)	Cash refunds (cash book)
Discount received (cash book)	Interest expense (purchases journal)
Contra-entry (general journal)	Balance c/d (if any)
Balance c/d (usually here)	

Sales ledger control acc.	
Debit	Credit
Balance b/d (usually here)	Balance b/d (if any)
Credit sales (sales journal)	Sales returns / returns inwards (sales returns journal)
Cash refunds (cash book)	Cash received (cash book)
Dishonoured cheques (cash book)	Discount allowed (cash book)
Interest income (sales journal / cash book)	Bad debts (general journal)
Recovered bad debts (general journal)	Cash from recovered bad debts (cash book)
Balance c/d (if any)	Contra-entry (general journal)
	Balance c/d (usually here)

❖ *cash transactions for sales & purchases*

	Advantages	Disadvantages
<b>Sales</b>	<ul style="list-style-type: none"> <li>- Will improve overall cash flow (1)</li> <li>- Reduces the possibility of irrecoverable debts (1)</li> </ul>	<ul style="list-style-type: none"> <li>- Maybe a reduction in number of customers (1)</li> <li>- May have to reduce selling price to attract new customers (1)</li> </ul>
<b>Purchases</b>	<ul style="list-style-type: none"> <li>- May improve the relationships w/ the suppliers (1)</li> <li>- May be able to negotiate a better purchase price (1)</li> </ul>	<ul style="list-style-type: none"> <li>- Overall cash flow will decrease (1)</li> <li>- Not making use of available credit terms (1)</li> </ul>

❖ *reconcile control acc. & ledgers*

- Control accounts are prepared using totals from books of prime entry.
- Provision for doubtful debts & are not included in a sales ledger control acc. as these accounts are kept in a general ledger.
- Transfers between personal accounts that appear in both the ledgers are known as contra items.
- Individual ledger accounts in the sales ledger are used to send out statements & reminders to credit customers.
- **Reasons for credit balance:**
  - The customer may have overpaid the invoice
  - The customer may pay in advance, / may pay a deposit before the delivery of the goods, & thus before the sales invoice has been raised
  - The customer may have paid in full, but returned some / all of the goods. The seller has raised a credit note & posted it to the customer's acc. & also to the sales ledger control acc.

Effect of not updating the:	
Sales Ledger	Purchases Ledger
Business may not be collecting the right amount from credit customers.	Incorrect purchase ledger balances could mean possible disputes w/ suppliers affecting deliveries
It may also risk resulting in irrecoverable debts	May result in credit facilities being w/drawn.
Non-collection of debts would negatively impact cash balances	May lead to overpaying suppliers
May lead to incorrect financial statements	May result in loss of opportunities of settlement discount.

❖ outline the uses & limitations of control acc.

Uses	Limitations
Find errors if the balances do not agree	Control acc. may contain errors as well
Prevents fraud as control acc. are prepared by someone who is not involved in maintaining the ledgers	They do not guarantee the accuracy of individual acc. (compensating errors)
Important procedure if business does not maintain double-entry system	May add to business costs as a specialist is required to verify accuracy
May identify the acc. in which the errors have been made	
Provide totals of TR & TP for the TB	

## 1.4 Preparation of financial statements

❖ understand the need for & purpose of financial statements

- **For management purposes** – the financial statements are used by management to highlight areas of good practise & to find areas w/in the business that could benefit from improvement
- **For stewardship purposes** – the financial statements show the providers of finance how the funds that they provided are being used. Are the funds being used wisely / is the finance being wasted?
- **Benefits of preparing annual financial statements:**
  - Helps future planning/targets/goals
  - Decision making
  - Able to assess performance/comparisons
  - Valuation of assets, liabilities & capital
  - For tax purposes
  - To present to bank for additional finance
- **Four characteristics of financial statements**
  - **Understandability** – info. should be capable of being understood by users w/ reasonable knowledge.
  - **Relevance** – must be relevant & contain information that is able to influence the decisions of users.
  - **Reliability** – must contain information that is a faithful representation of what has taken place.
  - **Comparability** – users must be confident that they can compare data from one time period to another.

### 1.4.1 Adjustments to financial statements

❖ adjustments needed for accruals & prepayments

- **Accrual:** an expense which is due w/in the accounting period but has not been paid. When preparing the SOFP these are known collectively as *other payables*.
- **Prepayment:** payments made by a business in advance of the benefits to be derived from them. When preparing the statement of financial statement these are collectively known as *other receivables*.

Item	Treatment in IS	Treatment in SOFP
Accrued expense	Add to expense amount in the TB It has the effect of increasing the total expense	Shows as other payable under current liabilities
Prepaid expense	Deduct from expense amount in the TB It has the effect of reducing the total expense	Shows as other receivable under current assets
Accrued income	Add to the income amount in the TB	Show as other receivables under current assets
Prepaid income	Deduct from the income amount in the TB	Show as other payable under current liabilities

❖ *adjustments needed for irrecoverable debts & doubtful debts:*

- **Irrecoverable debt:** a debt due from a customer which it is expected will never be paid by them
- **Doubtful debt:** a debt due from a customer where it is uncertain whether / not it will be repaid by them.
- Why is a provision for doubtful debts created?
  - Application of concept of prudence (1)
  - Application of matching concept (1)
  - Profit may be overstated in the event of irrecoverable debts (1)
  - TR / current assets may be overstated (1)
- **Factors to consider when setting rate for provision of doubtful debts**
  - The business's past experience of irrecoverable debts (1)
  - The usual rate applied for businesses of this type (1)
  - Analysis of the existing debts & how long they have been outstanding/based on ageing schedule of TR (1)
- When the provision is first created, debit the IS & credit a provision for doubtful debts acc. w/ the full amount of the provision. In the years that follow, the entries in the acc. will only be increased / decreased in the amounts required for the provision:
  - Debit the IS & credit the provision for doubtful debts w/ any increases in the provision
  - Credit the IS & debit the provision for doubtful debts w/ any decreases in the provision

Lew has decided to create a provision for doubtful debts account at two per cent of trade receivables outstanding at the financial year end on 30 June each year. Trade receivables outstanding at 30 June 2014 was \$36 700.

**Required**

Prepare:

- a a provision for doubtful debts account at 30 June 2014
- b an extract from the income statement for the year ended 30 June 2014 showing relevant details
- c an extract from the statement of financial position at 30 June 2014.

**Answer**

a	Dr	Provision for doubtful debts account	Cr
			\$
		30 June 2014	734
		Income statement	734

b		\$
<b>Extract from income statement for the year ended 30 June 2014</b>		
Expenses		
Provision for doubtful debts	734	

c		\$	\$
<b>Extract from statement of financial position at 30 June 2014</b>			
<b>Current assets</b>			
Trade receivables	36 700		
Less Provision for doubtful debts	(734)	35 966	

Jessica owes Mahmoud \$540. Jessica cannot pay the amount that she owes. Mahmoud writes off the debt. The entries are:

<i>Jessica</i>		<i>Sales ledger control account</i>	
Balance b/d	540	Irrecoverable debts account	540
<b>Irrecoverable debts account</b>			
Jessica	540	Income statement	540
<b>Income statement</b>			
Less expenses			
Irrecoverable debts written off	540		

❖ adjustments needed for depreciation

Steig Wallander purchased a machine on 1 January 2012 for \$64 000.

Depreciation is to be charged at 20 per cent per annum using the reducing balance method.

Steig's financial year end is 31 December.

**Required**

Prepare:

- a a machinery account
- b a provision for depreciation of machinery account
- c income statement extracts to record the necessary entries
- d extracts from the statements of financial position for the three years 2012, 2013 and 2014.

**Answer**

a

Dr		Machinery account		Cr
		\$		
1 Jan 2012	Bank	64 000		

b

Dr		Provision for depreciation of machinery account		Cr	
		\$		\$	
31 Dec 2012	Balance c/d	12 800	31 Dec 2012	Income statement	12 800
		<u>12 800</u>			<u>12 800</u>
			1 Jan 2013	Balance b/d	12 800
31 Dec 2013	Balance c/d	23 040	31 Dec 2013	Income statement	10 240
		<u>23 040</u>			<u>23 040</u>
			1 Jan 2014	Balance b/d	23 040
31 Dec 2014	Balance c/d	31 232	31 Dec 2014	Income statement	8 192
		<u>31 232</u>			<u>31 232</u>
			1 Jan 2015	Balance b/d	31 232

c

Extract from income statement for the year ended 31 December 2012		\$
Gross profit		
Less Expenses		
Provision for depreciation of machinery		12 800
<b>Extract from income statement for the year ended 31 December 2013</b>		
Gross profit		\$
Less Expenses		
Provision for depreciation of machinery		10 240
<b>Extract from income statement for the year ended 31 December 2014</b>		
Gross profit		\$
Less Expenses		
Provision for depreciation of machinery		8 192

<b>d Extract from statement of financial position at 31 December 2012</b>	
<b>Non-current asset</b>	<b>\$</b>
Machinery at cost	64 000
Less Depreciation to date	12 800
	<u>51 200</u>
<b>Extract from statement of financial position at 31 December 2013</b>	
	<b>\$</b>
<b>Non-current asset</b>	
Machinery at cost	64 000
Less Depreciation to date	23 040
	<u>40 960</u>
<b>Extract from statement of financial position at 31 December 2014</b>	
	<b>\$</b>
<b>Non-current asset</b>	
Machinery at cost	64 000
Less Depreciation to date	31 232
	<u>32 768</u>

❖ *adjustments needed for inventory (net realisable value)*

- **Cost of inventory** = cost of purchase + any other cost incurred to bring inventory in present location and condition
- **NRV** = selling price – cost of completion – selling expenses
- **Consequences of holding too much inventory:**
  - Theft (1)
  - Storage costs (1)
  - Insurance (1)
  - Obsolescence (1)
  - Damage (1)
  - Opportunity cost (1)

## 1.4.2 Sole traders

❖ *Introduction*

- **Sole trader:** the owner of a business who runs a business on their own.

Benefits	Drawbacks
Entitled to all profits	Unlimited liability / no separate legal entity
Quicker decision making	All the risk / responsibilities
Full control of business operations	Limited opportunities for new ideas

❖ prepare an ISS & SOFP from full / incomplete records

Sole Trader (Name)			
Income statement for the year ended 31 December 2013			
	\$000	\$000	\$000
Revenue (sales)			520
Less Sales returns			<u>3</u>
			517
Less Cost of sales			
Opening inventory		46	
Purchases	196		
Less Purchase returns	<u>4</u>		
	192		
Less Goods for own use	<u>2</u>		
	190		
Carriage inwards	<u>5</u>	195	
		241	
Less closing inventory		<u>56</u>	185
Gross profit			332
Discount received			2
Rent received			14
Commission received			4
* Profit on disposal of non-current assets			-
** Reduction in provision for doubtful debts			<u>-</u>
			352
Less Expenses			
Wages and salaries		84	
Office expenses		52	
Rent and rates		26	
Insurance		19	
Motor vehicle expenses		28	
Selling expenses		22	
Loan interest		2	
* Loss on disposal of non-current assets		7	
** Provision for doubtful debts		3	
Depreciation of fixtures and fittings		9	
Depreciation of office equipment		6	
Depreciation of motor vehicles		<u>8</u>	
			<u>266</u>
*** Profit for the year			<u>86</u>

Sole Trader (Name)			
Statement of financial position at 31 December 2013			
	\$000	\$000	\$000
<b>ASSETS</b>			
<b>Non-current assets</b>	<b>Cost</b>	<b>Depreciation to date</b>	<b>Book value</b>
Land and buildings	50	-	50
Fixtures and fittings	49	39	10
Office equipment	36	16	10
Motor vehicles	<u>85</u>	<u>32</u>	<u>53</u>
	220	87	123
<b>Current assets</b>			
Inventory		56	
Trade receivables	53		
Less Provision for doubtful debts	<u>6</u>	47	
Other receivables		6	
* Cash at bank		12	
Cash on hand		<u>2</u>	123
<b>Total assets</b>			<b>226</b>
<b>CAPITAL &amp; LIABILITIES</b>			
<b>Capital</b>			
Opening balance			152
Add Profit for the year *			<u>86</u>
			238
Deduct drawings			<u>62</u>
			176
<b>Non-current liabilities</b>			
Bank loan			20
<b>Current liabilities</b>			
Trade payables		21	
Other payables		6	
Bank overdraft		<u>3</u>	30
<b>Total capital and liabilities</b>			<b>226</b>

**Notes:**

- \* If only one asset was sold during the year only one of these items will appear.
- \*\* If the provision reduces, the surplus amount is added to the gross profit: if the provision increases, the amount required is included in the expenses.
- \*\*\* If the expenses exceed the gross profit plus other income, the resulting figure is described as a net loss.

**Note:**

- \* If there is a net loss, this will be deducted rather than added.

### 1.4.3 Partnerships

❖ prepare an ISS & SOFP from full / incomplete records

The income statement of a partnership is the same as the income statement of a sole trader. The net profit is then appropriated to the partners as follows. Assume that the partners share profits in the ratio 2:1.

(Partnership Name)			
Profit and Loss Appropriation Account for the year ended 31 December 2013			
	\$	\$	\$
Net profit			45,000
Add Interest on drawings – Partner A		2,200	
Partner B		<u>3,800</u>	<u>6,000</u>
			51,000
Less Interest on capital – Partner A	2,000		
Partner B	<u>1,000</u>	3,000	
Partner's salary – Partner B		<u>18,000</u>	<u>21,000</u>
			<u>30,000</u>
Profit shares Partner A		20,000	
Partner B		<u>10,000</u>	<u>30,000</u>

The first section of the statement of financial position of a partnership is similar to a sole trader. The second section shows the capital and current account of each partner. Where the full details of the partners' current accounts are not required, this section could be presented as follows.

(Partnership Name)			
Statement of financial position (extract) at 31 December 2013			
	Partner A	Partner B	Total
<b>Capital accounts</b>	40,000	20,000	60,000
* <b>Current accounts</b>	<u>28,200</u>	<u>16,800</u>	<u>45,000</u>
	<u>68,200</u>	<u>36,800</u>	<u>105,000</u>

**Note:**

- \* Where the balance of a partner's current account is a debit balance it is shown in brackets and deducted rather than added.

Where full details of the current accounts are required the 'Financed by' section of a partnership statement of financial position could be presented as follows.

Partnership (Name)			
Statement of financial position (extract) at 31 December 2013			
	Partner A	Partner B	Total
<b>Capital accounts</b>	<u>40,000</u>	<u>20,000</u>	<u>60,000</u>
<b>Current accounts</b>			
* Opening balance	27,200	17,300	44,500
Interest on capital	2,000	1,000	3,000
Partner's salary	-	18,000	18,000
** Profit shares	<u>20,000</u>	<u>10,000</u>	<u>30,000</u>
	49,200	46,300	95,500
Less Drawings	<u>21,000</u>	<u>29,500</u>	<u>50,500</u>
	<u>28,200</u>	<u>16,800</u>	<u>45,000</u>

**Notes:**

- \* Where a balance is a debit balance it is shown in brackets and deducted rather than added.
- \*\* Where there is a loss to share out it is shown in brackets and deducted rather than added.

❖ *Partnership acc.*

- **Appropriation acc.:** an acc. prepared after the IS. it is used to show how the profits of the year is divided between each partner. The following have to be considered:
  - Partner's salaries
  - Interest on partner's drawings
  - Interest on partner's capital
  - Share of the residual profit
- **Interest on capital:** a share of the profit for the year (usually) based on a percentage of the amount of fixed capital each partner has contributed to the partnership.
- **Interest on drawings:** a charge made on the annual drawings made by each partner, usually calculated as a percentage of the drawings made.
- **Capital acc.:** an acc. to record the sum of money which a partner introduces into a partnership. It is only adjusted for any further capital introduced, any capital w/drawn, any share of goodwill / any profit on the revaluation of partnership assets.
- **Current acc.:** an acc. which records a partner's share of profits & any drawings made by them.
- Why a partner have an overdrawn account?
  - They may have drawn more than profit earned
  - Partnership may have sustained losses

❖ *Advantages & disadvantages of a partnership*

- **Partnership:** two / more people carrying on a business together w/ a view to making profit

Advantages	Disadvantages
The capital invested by partners is often more than can be raised by a sole trader	A partner does not have a same freedom to act independently as a sole trader has.
A greater fund of knowledge, experience & expertise in running business is available to a partnership	A partner may be frustrated by the other partner(s) in their plans for direction & development of the business
A partnership may be able to offer a greater range of services to its customers	Profits have to be shared by all partners
Losses are shared by all the partners	A partner may be legally liable for the acts of the other partner(s)
The business does not need to close down, / be run by an inexperienced staff, in the absence of one of the partners; the other partner(s) will provide cover.	

❖ *Interest on drawing & capital*

- **Advantages of interest on capital**
  - To the partners – reward the partners for their investment in the business
  - To the partnership – encourage partners to invest in the business not elsewhere
- **Advantages of interest on drawings**
  - To the partners – reduce the drawings
  - To the partnership – deter partners from drawing cash out of the business, causing cash flow problems

❖ *Partnership agreement*

- **Partnership agreement:** an agreement, usually in writing, setting out the terms of a formal partnership
- **Partnership Act 1890:** The rules which govern a partnership in the absence of a formal partnership agreement
  - All partners are entitled to contribute equally to the capital of the partnership
  - Partners are not entitled to interest on the capital they have contributed
  - Partners are not entitled to salaries
  - Partners are not to be charged interest on their drawings
  - Partners will share profits & losses equally
  - Partners are entitled to interest at 5% per annum in loans they make to the partnership
- **Why should partners have written agreement?**
  - Avoidance of disputes (1).
  - The deed usually states management responsibilities (1)
  - Agreed limits on drawings & agreed amounts of fixed capital (1).

- Ensure partners are properly rewarded (/ penalised) for their contributions (1).
- The deed may include rewards for partners who have undertaken more management responsibilities/provided more capital/& penalised partners whose drawings have been the most (1)

❖ *prepare capital & current acc.*

- **Fluctuating capital acc.:**

Capital accounts					
	Tayyiba	Adnan		Tayyiba	Adnan
	\$	\$		\$	\$
Drawings	22350	26850	Balance b/d	40000	50000
Balance c/d	35388	40157	Salary	6000	
			Interest on capital	2400	3000
			Share of profit	9338	14007
	<u>57738</u>	<u>67007</u>		<u>57738</u>	<u>67007</u>
			Balances b/d	35388	40157

- **Fixed capital acc. & current acc.:**

Capital accounts					
	Tawanda	Jacob		Tawanda	Jacob
	\$	\$		\$	\$
			Balances b/d	30000	45000

Current accounts					
	Tawanda	Jacob		Tawanda	Jacob
	\$	\$		\$	\$
Drawings	20653	16234	Balances b/d	1542	238
Interest on drawings	541	452	Salary	4800	
			Interest on capital	2100	3150
			Share of profits	18000	9000
Balance c/d	5248		Balance c/d		4298
	<u>26442</u>	<u>16686</u>		<u>26442</u>	<u>16686</u>
Balance b/d		4298	Balance b/d	5248	

❖ *reasons to maintain separate capital acc. for each partner*

- They will need to keep their investments separate to distinguish between individual partners.
- To calculate interest on capital
- To keep capital invested separate from profit & drawings
- To help avoid the possibility of partners overdrawing
- To reward the partner who has invested more capital w/ interest on the amount invested
- To identify partners' drawings in order to calculate interest on drawings

❖ *what is a partnership change?*

- **A change in partnership occurs:**

- When partners agree to change the way in which profits & losses are to be shared
- When a new partner joins a firm, / an existing partner leaves - disagreements between partners
- On the death / retirement of a partner
- Bankruptcy
- **Goodwill:** the amount by which the value of the partnership as a going concern exceeds the net value of its assets if they were sold separately. **Factors that affect goodwill:**
  - Reputation
  - Customer base/monopoly
  - Location
  - Quality of product
  - Skilled workforce

- **Why may partners value goodwill and revalue assets when a partner retires?**
  - Fair value of assets may be greater than book value
  - Partners are rewarded for their efforts in building up the business
  - It is only fair that the retiring partner is compensated this way
- **Revaluation of assets:** adjustment made to the value of the partnerships assets to reflect their market value. It may result in some assets increasing in value, i.e. land, whilst others decrease, i.e. machinery
- **Why are assets revalued on the change of a partnership?**
  - To give the benefit of the change in value of the business to the existing partners & any partner who may be retiring.
  - So that the SOFP on the entry of the new partner shows a true & fair view.
- **Realisation acc.:** an acc. prepared when a partnership is ceasing to trade, to record the book value of the assets & liabilities & how much is received for them if sold, / paid out in respect of liabilities. The result will be a P/L on realisation.

❖ *realisation acc.*

Realisation account			
		\$	\$
Discounts allowed	200	Discounts received	500
Non-current assets	40 000	Bank (non-current assets)	58 000
Inventory	9 000	Capital account – Yoko (inventory)	7 700
Bank (costs)	3 400		
Profit on realisation – Yoko	6 800		
Cesc	6 800		
	<u>66 200</u>		<u>66 200</u>

Bank account			
		\$	\$
Balance b/d	2 000	Loan – Cesc	2 000
Trade receivables	3 800	Trade payables	7 500
Realisation account (non-current assets)	58 000	Realisation account (costs)	3 400
		Capital accounts – Yoko	24 100
		Cesc	26 800
	<u>63 800</u>		<u>63 800</u>

Capital accounts					
	Yoko	Cesc	Yoko	Cesc	
	\$	\$	\$	\$	
Realisation account	7 700		Balances b/d	25 000	20 000
Bank	24 100	26 800	Realisation account	6 800	6 800
	<u>31 800</u>	<u>26 800</u>		<u>31 800</u>	<u>26 800</u>

❖ *revaluation acc.*

Revaluation account				Capital – Xandra			
		\$	\$			\$	\$
Equipment	7 500	Premises	52 000	Bal b/d		40 000	
Vehicle	9 000			Bal c/d	60 000	Revaln a/c	20 000
Stock	400				<u>60 000</u>		<u>60 000</u>
Trade receivables	100					Bal b/d	60 000
Capital –							
Xandra	20 000						
Aziz	15 000						
	<u>52 000</u>		<u>52 000</u>				

Premises account				Equipment account			
\$		\$		\$		\$	
Bal b/d	48 000			Bal b/d	12 000	Revaluation	7 500
Revaluation	52 000	Bal c/d	100 000			Bal c/d	4 500
	<u>100 000</u>		<u>100 000</u>		<u>12 000</u>		<u>12 000</u>
Bal b/d	100 000			Bal b/d	4 500		

Vehicle account				Inventory account			
\$		\$		\$		\$	
Bal b/d	15 000	Revaluation	9 000	Bal b/d	2 400	Revaluation	400
		Bal c/d	6 000			Bal c/d	2 000
	<u>15 000</u>		<u>15 000</u>		<u>2 400</u>		<u>2 400</u>
Bal b/d	6 000			Bal b/d	2 000		

Trade receivables account			
\$		\$	
Bal b/d	1 750	Revaluation	100
		Bal c/d	1 650
	<u>1 750</u>		<u>1 750</u>
Bal b/d	1 650		

❖ *changes in profit sharing ratio*

Adil and Gurvinder share profits and losses equally. Their financial year end is 31 December. They admit Camille as a partner on 1 July 2014. They agree that Adil, Gurvinder and Camille will share profits 3:2:1 respectively. The profit for the year ended 31 December 2014 was \$70 000 and accrued evenly throughout the year.

There are two businesses involved:

- up to 30 June 2014, the owners were Adil and Gurvinder
- from 1 July 2014, the owners were Adil, Gurvinder and Camille

**Extract from the income statement for the 6 months ended 30 June 2014**

		\$	\$
Profit for 6 months			35 000
Profit share —	Adil	(17 500)	
	Gurvinder	<u>(17 500)</u>	<u>(35 000)</u>

**Extract from the income statement for the 6 months ended 31 December 2014**

		\$	\$
Profit for 6 months			35 000
Profit share —	Adil	(17 500)*	
	Gurvinder	(11 667)*	
	Camille	<u>(5 833)*</u>	<u>(35 000)</u>

\* Note that the profit share has been rounded.

## 1.4.4 Limited companies

- ❖ prepare an ISS & SOFP from full / incomplete records

XYZ Limited Statement of financial position at 31 December 2013		
	2013 \$000	2012 \$000
<b>ASSETS</b>		
<b>Non-current assets</b>		
Goodwill	7,700	8,000
Property, plant & equipment	100,000	92,100
	<u>107,700</u>	<u>100,100</u>
<b>Current assets</b>		
Inventories	1,000	800
Trade and other receivables	5,000	4,000
Cash and cash equivalents	500	300
	<u>6,500</u>	<u>5,100</u>
<b>Total assets</b>	<b><u>114,200</u></b>	<b><u>105,200</u></b>
<b>EQUITY &amp; LIABILITIES</b>		
<b>Capital and reserves</b>		
Issued capital	40,000	40,000
Share premium	2,000	2,000
General reserve	10,000	10,000
Retained earnings	52,500	43,000
	<u>104,500</u>	<u>95,000</u>
<b>Non-current liabilities</b>		
Bank loan	5,000	5,200
<b>Current liabilities</b>		
Trade and other payables	1,200	1,000
Tax liabilities	3,500	4,000
	<u>4,700</u>	<u>5,000</u>
<b>Total equity and liabilities</b>	<b><u>114,200</u></b>	<b><u>105,200</u></b>

- ❖ introduction to limited companies

- **Limited company:** a separate legal entity whose existence is separate from its owners; the liabilities of the members are limited to the amount paid (/ to be paid) on shares issued to them.

Partnership	Private limited company (Ltd)
2 to 20 partners	At least one member, no maximum
Unlimited liability of partners	Limited liability of shareholders
Profits credited to partners' current acc. according to partnership agreement	Profits distributed by dividends
No tax on business profits – individual partners pay tax on their earnings as partners	Corporation tax charged on company profits
Partners run the business	Shareholders delegate running of the business to directors

Private limited company	Public limited company
'Ltd' appears after company name	'plc' appears after company name
Minimum of one shareholder to the limit of authorised share capital & at least one director	Minimum of two shareholders to the limit of authorised share capital & at least two directors
Share trading is restricted	No restriction to share trading
No stock market listing	Usually listed on recognised stock market

- ❖ describe the distinction between capital & revenue reserves

- **Revenue reserves:** the profits made by a company which have not been distributed to shareholders
- **Capital reserves:** gains which (usually) arise from non-trading activities, i.e. revaluation of a company's NCA

Capital reserve	Revenue reserve
Capital reserves are not normally created by transfer from profits	They may be created simply to strengthen the financial position of the company
They usually represent gains that have not been realised	Revenue reserves are created by transfer from profits
Capital reserves cannot be used to pay dividends	They may be created for a specific purpose
Can be used for bonus shares	Revenue reserves may be used to pay dividends
Share premium acc., revaluation reserve, capital redemption reserve	Retained earnings, general reserve, NCA replacement reserve
Helps protect creditors	

- **Why capital reserves may be used instead of revenue reserves to fund a bonus issue of shares?**
  - To retain reserves in the most distributable / flexible form
  - Revenue reserves are needed to fund the payment of dividends
- **What is meant by 'reserves were maintained in their most flexible form'?**
  - Using capital reserves before revenue reserves
  - To facilitate future payments of dividends
- **Share premium:** the excess over the nominal / par value of a share when it is issued. A share premium acc. is to write off expenses relating to:
  - company formation
  - the issue of debentures
  - the issue of shares
  - redemption of debentures
- **Revaluation reserve** – created when NCA are revalued in order to reflect an increase in the value. It ensures that the SOFP shows the permanent increase in value
- **E.g. NCA is purchased at \$200,000, has accumulated depreciation of \$120,000. It is revalued to \$350,000**

**Double entry:**

		\$		\$
Dr	Bank	150 000		
	Provision for doubtful debts	120 000		
Cr	Revaluation Reserve		270 000	

❖ *explain the different types of shares a company may issue*

- **Share capital:** the capital raised by a business by the issue of shares (usually) for cash, but may also be for consideration for other than cash, i.e. non-current / current assets.
- **Share:** the smallest division of the total share of capital of the company which can be issued in order to raise funds for the company
- **Nominal (/ par) value:** the face value of a share
  - **Issued capital** – total of the shares which have been issued to the shareholders
  - **Called-up capital** – money required to be paid by shareholders immediately
  - **Uncalled capital** – any amount of the share capital not yet called up (asked for) by the company
  - **Paid-up capital** – money received from shareholders on the called-up capital
  - **Calls in advance** – money received from shareholders who have paid calls before they are due
  - **Calls in arrear** – money due from shareholders who are late in paying their calls
  - **Forfeited shares** – shares which shareholders have lost because they have failed to pay their calls
- **Classes of shares:**
  - **Preference share:** a share which does not give the owner any ownership rights in the company. The holder will receive (usually) dividends at a fixed rate, payable before (in preference to) dividends to the ordinary shareholder. **Types of preference shares:**
    - **Non-cumulative preference shares** – shares not entitled to have any arrears of dividend carried forward to future years if the profit of any year is insufficient to pay the dividend in full.
    - **Cumulative preference shares** – shares entitled to have arrears of dividend carried forward to future years when sufficient profits may become available to pay the arrears
    - **Redeemable preference shares** – the company can approach the shareholders & buy back the shares from them. These will appear under NCLs in the statement of financial statement
    - **Non-redeemable preference shares** – the company will not buy them back in the future. They appear in the equity section of the statement, together w/ the other items.
  - **Ordinary share:** a share which represents equity ownership in a limited company. It entitles the owner to vote in matters put before them by the directors. It also entitles the holder to dividends at a varying amount as determined by the directors & depending on the profits made by the company & supposing all other liabilities can be satisfied.

Differences between ordinary shares, preference shares & debentures		
Ordinary shares	Preference shares	Debentures
Shares	Shares	Long-term loans (payables)
Part owner of company	Not owners	Not owners
Voting rights	(Usually) no voting rights	No voting rights

Paid out last in case of liquidation	Paid out before ordinary shareholders in case of liquidation	Paid out before preference shareholders in case of liquidation
Dividends	Dividends	Interest
Variable dividend	Fixed dividend	Fixed rate of interest
Part of equity capital	Part of equity capital (unless they are redeemable)	Not part of equity capital (NCL)

- Bonus share issue:** an issue of free shares to existing shareholders from the accumulated reserves of the company. The issue is usually in proportion to the existing ordinary shares (e.g. one bonus share for every four held). **A company may make a bonus share issue because:**
  - Improves the perception of the company size (1) by increasing the issued share capital of the company (1)
  - To capitalise non-distributable reserves (1) but overall, total equity will remain the same (1)
  - To reward the company's investors (1) when profits are not sufficient to pay dividends (1)
  - Can be used to keep existing shareholders happy (1) & may be attractive to potential investors (1)
- Rights issue of shares:** an issue of shares made for cash. The shares offered to existing shareholders usually in proportion to the shares held by them.

Benefits	Limitations
Quicker & cheaper than a new share issue	Can lead to a fall in the share price
More likely to be fully subscribed than a new share issue	
Results in a cash inflow	
Does not have to be repaid	
Would avoid any dilution of ownership	

Differences between bonus issue of shares & a rights issue of shares	
Bonus Shares	Rights Issue
Bonus shares are not paid for	Rights issue are paid for
Bonus shares do not change the net assets	Rights issue increases net assets
Bonus shares are issued to all shareholders	Shareholders have a choice whether to take up rights issue
Bonus shares are issued at par value	Rights issue may be made at a discount to market value/at a premium
Bonus shares do not give additional capital/equity	Rights issue gives additional capital/equity

Differences between debentures & a rights issue of shares	
Debentures	Rights Issue
Loan capital – repayable	Permanent capital – not repayable
Interest expense	Dividend payments are discretionary
No voting rights	Voting rights
Increases external borrowings – risky for shareholders	Increases equity holding
Security required	No security required

❖ prepare ledger acc. to record the issue of the different types of shares, including bonus & rights issues

- **Shares issued at par:**

		Bank			
		Ordinary share applicants 1000			
		Ordinary Share Applicants			
Ordinary share capital	1000	Bank		1000	
		Ordinary Share Capital			
		Ordinary share applicants		1000	

- **Shares issued at discount:**

		Bank			
		Ordinary share applicants 900			
		Ordinary Share Applicants			
Ordinary share capital	1000	Bank	900	Discount on shares	100
		Ordinary Share Capital			
		Ordinary share applicants		1000	
		Discount on shares			
		Ordinary share applicants		100	

- **Shares issued at premium:**

		Bank	
Ordinary share applicants	1200		
		Ordinary Share Applicants	
Ordinary share capital	1000	Bank	1200
Share premium	200		
		Ordinary Share Capital	
		Ordinary share applicants 1200	
		Share premium	
		Ordinary share applicants 200	

- **Bonus Issue:**

		Share premium	
Ordinary share capital			
		Ordinary share capital	
		Share premium	
		Retained earnings	
		Retained earnings	
Ordinary share capital			

- **Rights Issue:**

		Bank	
Ordinary share capital			
Share premium			
		Ordinary share capital	
		Bank	
		Share premium	
		Bank	

❖ *prepare a statement of changes in equity.*

- **Statement of changes in equity:** a statement prepared to show changes in a company's shares capital, reserves & retained earnings over a reporting period

**Statement of changes in equity for the year ended 31 December 2013**

	Share capital \$	Share premium \$	Revaluation reserve \$	Retained earnings \$	Total \$
Balance at start of year	150,000	5,000	20,000	108,000	283,000
Share issue	30,000	3,000			33,000
Profit for the year				58,000	58,000
Revaluation			30,000		30,000
Dividends paid				(12,000)	(12,000)
Balance at end of the year	<b>180,000</b>	<b>8,000</b>	<b>50,000</b>	<b>154,000</b>	<b>392,000</b>

❖ *company financing*

	Short-term financing	Long-term financing
Internal sources of finance	Cash management Credit control Inventory management	Retained earnings
External sources of finance	Bank overdrafts Short-term bank loans Factoring & invoice discounting Sale of unused NCA	Share capital Loan capital – debentures Convertible loan stock Long-term bank loans Leasing Sale & leaseback

## 1.5 Analysis & communication of accounting information to stakeholders

❖ understand the need for the analysis of financial data to aid decision making by stakeholders

- **Ways to compare financial data:**

- Compare the results of the business over time
- Compare the performance of businesses of different sizes
- Compare the performance of the business w/ the market leader
- Compare the performance of the business against industry averages

❖ identify & discuss the differing requirements for information of user groups

Internal Users	
Owners	<ul style="list-style-type: none"> <li>- To assess the overall performance of the business</li> <li>- To identify problematic areas where corrective action can be taken to improve future performance</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>- To assess the overall performance of the business</li> <li>- To consider the security of their investment</li> <li>- To assess the return they receive from the investment</li> <li>- To decide whether to sell their shares</li> </ul>
Managers & directors	<ul style="list-style-type: none"> <li>- To aid in decision making</li> <li>- Maybe assess how much bonus they may receive based on performance</li> <li>- For future wage &amp; salary negotiations.</li> <li>- To gauge continuity of employment &amp; job security.</li> </ul>
Workers	<ul style="list-style-type: none"> <li>- For future wage &amp; salary negotiations.</li> <li>- To gauge continuity of employment &amp; job security</li> </ul>
External Users	
Banks	<ul style="list-style-type: none"> <li>- They would assess whether a bank loan / overdraft should be granted to the business</li> <li>- If one already exists, then they will be interested to see if the business can maintain the repayments</li> </ul>
Future Shareholders	<ul style="list-style-type: none"> <li>- To compare the returns from several business to decide which business to invest in</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>- To assess whether to supply a business</li> <li>- To check for the settlement of payment by the business if already supplying</li> </ul>
Customers	<ul style="list-style-type: none"> <li>- To see if the business will be able to supply them in the future</li> </ul>
Government	<ul style="list-style-type: none"> <li>- To determine the level of tax which will be charged on profits of the business.</li> <li>- To decide whether / not to give a grant to the business</li> </ul>
Local Community	<ul style="list-style-type: none"> <li>- May be seeking employment thus may be interested in seeing if the business will continue to operate in the future</li> <li>- To ensure minimum environmental impacts of the business in the neighbourhood</li> </ul>
Trade Unions	<ul style="list-style-type: none"> <li>- They will look at profitability to see about future pay increases for its members</li> <li>- The job security for its members</li> <li>- To ensure fair treatment of members</li> </ul>
Public	<ul style="list-style-type: none"> <li>- They will be interested to see whether / not the business is operating ethically</li> </ul>

❖ calculate key accounting ratios to measure profitability, liquidity & efficiency:

- Profitability ratios

- **Gross profit margin %** =  $\frac{\text{gross profit}}{\text{revenue}} \times 100$
- **Return on capital employed %** =  $\frac{\text{Profit for the year before interest and tax}}{\text{Capital employed}} \times 100$
- **Capital employed** = Issued shares + Reserves + Non – current liabilities
- **Mark up %** =  $\frac{\text{Gross profit}}{\text{Cost of sales}} \times 100$
- **Profit margin %** =  $\frac{\text{Profit for the year (after interest)}}{\text{Revenue}} \times 100$
- **Expense to revenue ratio %** =  $\frac{\text{Expenses}}{\text{Revenue}} \times 100$
- **Operating expenses to revenue ratio %** =  $\frac{\text{Operating expenses}}{\text{Revenue}} \times 100$

- Liquidity ratios

- **Current ratio** =  $\frac{\text{Current assets}}{\text{Current liabilities}}$
- **Liquid ratio/Acid test ratio/Quick ratio** =  $\frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$

- Efficiency ratios

- **NCA turnover in times** =  $\frac{\text{Net revenue}}{\text{Total carrying amount of non-current assets/NBV}}$
- **TR turnover / Average collection period** =  $\frac{\text{Trade receivables}}{\text{Credit sales}} \times 365$
- **TP turnover / Average payment period** =  $\frac{\text{Trade payables}}{\text{Credit purchases}} \times 365$
- **Inventory turnover** =  $\frac{\text{Average inventory}}{\text{Cost of sales}} \times 365$
- **Rate of inventory turnover in times** =  $\frac{\text{Cost of sales}}{\text{Average inventory}}$

❖ use ratios to evaluate & comment on the profitability, liquidity & efficiency of an organisation

	Gross Profit Margin	Net Profit Margin
Increase	Increase in selling price	Increased gross profit
	Cheaper suppliers	Good control on overhead expenses
	Change in proportions of different goods	Lower costs
		Increase in other incomes
Decrease	Decrease in selling price	Decreased gross profit
	More expensive suppliers	Bad control of overhead expenses
	Not passing increase of costs to customers	Increased costs
		Decrease in other incomes
Importance	Measure the success in selling goods	Indicates how well a business controls its expenses
	Shows the gross profit earned per \$100 sales	Ratio shows net profit earned per \$100 sales
	Can be compared w/ other businesses and previous years	Comparisons

- **Current ratio** – should fall between 1.5:1 & 2:1
  - Measures the funds available in the short-term to pay current liabilities
  - It does not show liquid assets available because it includes inventory
  - It provides judgement on liquidity by comparing CA w/ CL
- **Liquid ratio** – usually around 1:1 but may depend on the business
  - The liquid ratio tests the ability of the business to cover current liabilities w/ current assets other than inventories.
- **Return on capital employed** – has been worse than the industry average for the last year (1), indicating a less efficient use of capital employed than other similar businesses/a poorer profit than other similar businesses (1).
- **Importance of ROCE:**
  - Measures profitability of investment in the business
  - Shows net profit earned per \$100 capital employed
  - Ratios show how efficiently capital is employed
  - Comparisons

Increase	Increased profit
	Decreased capital employed
	Resources used more effectively
Decrease	Decreased profit
	Increased capital employed
	Resources used less efficiently

- **TR turnover** – the longer a debt is outstanding, the more likely it is that the debt will prove to be irrecoverable. It is advised to have a shorter debt collection period than the TP turnover. Note that the answer is always rounded to the next full day. Thirty days is a reasonable amount, more than that may be a little too long.

- **How to improve TR collection period?**
  - Offer cash discount for prompt payment
  - Improve credit control
  - Charge interest on overdue accounts
  - Refuse further supplies for outstanding debts
- **TP turnover** – it must be ensured that suppliers are not made upset by being paid too slowly
- **Inventory turnover** – in every 'bundle' of inventory held by a business there is an element of profit & there is cash tied up in the goods. It is essential that this cash is released & that profits are earned as quickly as possible, so the more often inventory can be 'turned over' (sold), the better it is for the business.

Increase	Sells more inventory
	Decrease in closing inventory
Decrease	Business is selling less inventory
	Increase in closing inventory

- **NCA turnover** – the ratio is a measure of the efficient use of NCA. It indicates how much \$1 investment in NCA is able to generate in terms of sales. The higher the ratio, the greater is the recovery of the investment in those NCA. an increase in ratio year on year indicates a more efficient use of NCA.
  - NCA to turnover ratio: has remained better than the industry average (1) indicating a more efficient use of NCA than other similar businesses/a larger turnover than other similar businesses (1).
- A fall in the ratio might indicate:
  - Less efficient use of assets
  - Purchase of more NCA
  - Revaluation of assets
- ❖ *identify & discuss the limitations of accounting information & ratios*
  - **Results are based on historic cost** – may be misleading if results are compared over a long period
  - **Emphasis is placed on past results** – they are not a totally reliable indicator of future results
  - **Published acc. only give an overview** – perhaps disguising inefficient sections / departments
  - **Financial statements only show the monetary aspects of a business** – they do not show the strengths & weaknesses of individual managers / staff, staff welfare, ethical aspects, etc.
  - **It is difficult to compare two businesses** – they have different sites, management teams, staff, customers, etc.
  - **External environment of the business may change** – e.g. devaluation of currency may cause imported materials to rise in price.
  - **Every business may operate differently** – different structures, methods of finance, expense & revenue patterns, accounting policies, techniques, methods of measuring, conventions, etc.
  - **Financial statements are prepared on a particular date** – that date may be unrepresentative of the usual position of the business.
  - **Ratios only show the results of business activity** – they do not indicate the causes of good / bad results
  - **Reasons why it may be difficult to compare financial ratio between businesses**
    - Companies may use different accounting policies
    - Historical cost is used to prepare acc. therefore may be misleading
    - There may be different year-ends/seasonal factors
    - There may be non-monetary factors to consider
    - Relative size of each business
    - The effect of window dressing
- **How to improve liquidity ratios?**
  - Introduce cash as capital
  - Obtain long-term loans
  - Surplus from disposal of NCA
  - Reduce drawings
  - Reduce inventory level (Acid test ratio)
- **How to improve working capital?**
  - Introduce cash as capital
  - Obtain long-term loans
  - Surplus from disposal of NCA
  - Reduce drawings

## 2 Cost & Management accounting

### 2.1 Costing for materials & labour

❖ *understand the need to acc. for material & labour costs.*

- **Cost accounting:** a method of accounting where all the costs associated w/ a particular activity / product are collected together, classified & recorded.
- **Management accounting:** the process of preparing reports & acc. which can be used by managers as a basis for making decisions on the future performance of the business.
- Management accounting provides management w/ information which is not obtainable from the financial acc. of a business
- W/ cost accounting & management accounting the organisation is looking forward. It is gathering & analysing information which will be used as a basis for future decisions affecting the performance & profitability of the firm.

❖ *identify & calculate fixed costs, variable costs, semi-variable costs & stepped costs*

- **Fixed cost:** a cost that remains unchanged w/in a certain level of activity / output
- **Variable cost:** a cost which varies in direct proportion to changes in the level of output
- **Semi-variable cost** – costs that cannot be classified as either fixed costs / variable costs because they contain an element of both
- **Stepped costs** – remain fixed until a certain level of business activity is reached.

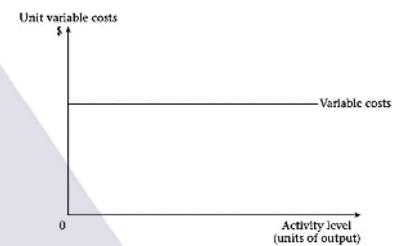


Figure 28.3 Unit variable costs

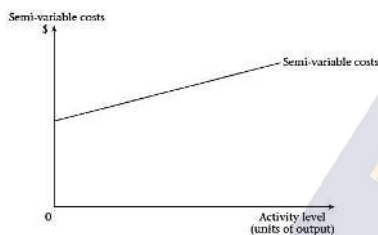


Figure 28.5 Semi-variable costs

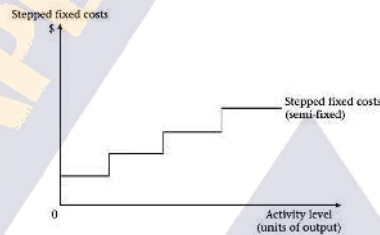


Figure 28.6 Stepped fixed costs

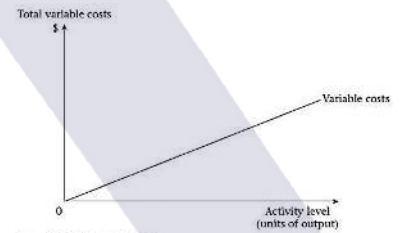


Figure 28.4 Total variable costs

❖ *identify the elements of direct & indirect materials & labour*

- **Direct costs** – include direct materials, direct labour & direct expenses
  - **Direct materials** – materials from which goods are made, & carriage inwards paid on the materials
  - **Direct labour** – the wages of workers who actually make goods
  - **Direct expenses** – royalties, licence fees, & so on
- **Indirect costs** – indirect materials, indirect wages & other overhead costs.
  - **Indirect materials** – purchased for the factory, e.g. cleaning materials, / lubricating oil for any machinery
  - **Indirect wages** – the wages of all factory workers who do not actually make the finished goods, e.g. factory managers, supervisors, store staff, cleaners & so on.
  - **Overhead costs** – rent, heating & lighting, depreciation & so on.

❖ *calculate the value of closing inventory using the FIFO & AVCO methods (perpetual & periodic)*

- **First in, first out (FIFO)** – assumes that the first items to be bought will be the first to be used, although this may not be the physical distribution of the goods. Thus, remaining inventory valuation will always be the value of the most recently purchased items.

The value of closing inventory using the FIFO method of issue is \$24.00.

Date	Receipts	Issues	Balance	
2 February	8 @ \$10		\$80.00	(8 @ \$10)
7 February		6	\$20.00	(2 @ \$10)
9 February	9 @ \$11		\$119.00	(2 @ \$10; 9 @ \$11)
16 February		10	\$11.00	(1 @ \$11)
24 February	7 @ \$12		\$95.00	(1 @ \$11; 7 @ \$12)
27 February		6	\$24.00	(2 @ \$12)

- **Average cost (AVCO)** – a new average value (usually the weighted average using the number of items bought) is calculated each time a new delivery of inventory is acquired.

The value of closing inventory of component SMH/19 using the weighted average cost (AVCO) method is \$23.70.

Date	Receipts	Issues	Balance	
2 February	8 @ \$10		\$80.00	(8 @ \$10)
7 February		6	\$20.00	(2 @ \$10)
9 February	9 @ \$11		\$119.00	(Average cost \$119.00/11 = \$10.82)
16 February		10	\$10.82	(\$10.82 x 1)
24 February	7 @ \$12		\$94.82	(Average cost \$94.82/8 = \$11.85)
27 February		6	\$23.70	(\$11.85 x 2)

- **Perpetual inventory** – maintains a running balance of inventory-on-hand after each transaction. FIFO & AVCO are typical perpetual inventory
  - **Periodic inventory** – shows the balance of inventory only at intervals (e.g. at the end of each month). The total of items used in the period is deducted from the total of items received to give the balance of items
- ❖ *calculate labour costs using different methods of remuneration including bonus schemes*
- **Hourly rate** – divide the hourly rate by the amount the worker can produce in an hour to work out the direct labour cost per unit
  - **Piece rate** – by how much the worker produces, calculated on the number of units of output / pieces the worker makes
  - **Annual salary** – used for paying office staff / managers, this would be regarded as an indirect labour cost
  - **Bonus Schemes:**
    - **Overtime payment:** an amount paid to an employee for working longer than the time they are contracted to work
    - **Bonus payment:** the additional amount paid to an employee for producing goods in a time less than allowed
- ❖ *understand the different characteristics, & the appropriateness, of using FIFO, AVCO & LIFO*

Advantages	Disadvantages
<b>FIFO</b>	
- It is a relatively simple system to use	- Manufacturing businesses usually prefer to charge materials to production at current purchase prices / selling prices, but use FIFO to value inventories for their financial acc.
- It is generally realistic as materials are generally used in FIFO order, especially if perishable	- Identical items of inventory from batches bought at different times may be used for similar jobs, w/ result that job A may be charged for the item at a different price from job B. The customer for job B may be unfairly treated as a result. Quotations for jobs when materials are based on FIFO may be unreliable.
- Prices used are those that actually have been paid for goods	

- Closing inventory is valued on current price levels	- In times of rising prices, the closing inventory in the financial acc. will be priced at the latest (high) prices. This results in lowering cost of sales & increasing gross profit. It may be considered that this is not consistent w/ the concept of prudence. However, as stated above, the method is acceptable under IAS 2.
- Acceptable method of inventory valuation for the purposes of the Companies Act 2006 & accounting standards (IAS 2)	
<b>AVCO</b>	
- The use of average prices avoids the inequality of identical items being charges to different jobs at different prices	- The average price must be recalculated after every purchase of inventory
- ACVO recognises that identical items purchased at different times & prices have identical values. Averaged prices are truer to this concept than the actual prices used for AVCO	
- Averaging costs may smooth variations in production costs, & comparisons between the results of different periods may be more meaningful.	- The average price does not represent any price actually paid for inventory.
- Averaged prices used to value closing inventory may be fairly close to the latest prices	
- AVCO is acceptable for the purposed of the Companies Act 2006 & IAS 2	
<b>LIFO</b>	
- The value of closing inventory is based on prices actually paid for the goods	- The most recent prices are not used for inventory valuation purposes
- In times of rising prices, LIFO values inventory at lower prices than other methods	- LIFO is not accepted by international accounting standards IAS 2
- Issues from stores are valued at most recent prices	- LIFO is less realistic than FIFO since it assumes that most recently acquired goods will be issued before older goods
- Valuations of closing inventory is easy to calculate	

❖ demonstrate the effect of different methods of valuing inventory of material on profit.

	FIFO		AVCO	
	\$	\$	\$	\$
Sales		440.00		440.00
Less Cost of sales				
Opening inventory	0		0	
Purchases	263.00		263.00	
	<u>263.00</u>		<u>263.00</u>	
Less closing inventory	24.00	239.00	23.70	239.30
Gross profit		<u>201.00</u>		<u>200.70</u>

## 2.2 Traditional costing methods

❖ candidates should understand the application of traditional costing methods.

### 2.2.1 Absorption costing

❖ allocate & apportion overhead expenditure between production & service departments

Table 28.1 Bases of apportioning indirect costs

Overhead	Basis of apportionment to cost centres
Rent	Floor area of cost centre
Local taxes	Floor area of cost centre
Insurance	Value of items being insured
Heating and lighting	Volume of cost centre (if this is not available then floor area may be used)
Depreciation	Cost or book value of the asset in cost centre
Canteen	Numbers of personnel in each cost centre
Personnel	Numbers of personnel in each cost centre

	Production departments			Service departments	
	M	N	P	Q	R
	\$	\$	\$	\$	\$
Total costs	45000	60000	20000	10000	12000
Apportionment of Dept R costs	2400	1200	3600	4800	(12000)
	<u>47400</u>	<u>61200</u>	<u>23600</u>	<u>14800</u>	
Apportionment of Dept Q costs	5920	4440	2960	(14800)	1480
	<u>53320</u>	<u>65640</u>	<u>26560</u>		<u>1480</u>

**Note**

- Department R has now been eliminated.
- Always start with the service department with the greater costs.

❖ calculate overhead absorption rates

- **On the basis of Direct Labour Hours (if production is labour intensive)**

$$\frac{\text{Total budgeted expenditure}}{\text{Total budgeted labour hours}} = \$x \text{ per direct labour hour}$$

- **On the basis of Machine Hours (if production is capital intensive)**

$$\frac{\text{Total budgeted expenditure}}{\text{Total budgeted machine hours}} = \$x \text{ per machine hour}$$

❖ calculate & explain the causes of under absorption & over absorption of overheads

- **Overhead recovered** =  $OAR \times \text{Budgeted hours}$
- **Under-absorption** = budgeted expenditure < overhead recovered
- **Over-absorption** = budgeted expenditure > overhead recovered
- **The effect of over absorption & under absorption of overheads on profits:**
  - Over absorption of overheads will mean that too much overhead is charged to the product (1). This means that a higher price is charged to the customer (1) leading to increased profits (1).
  - Over absorption of overheads could also lead to a higher selling price (1) leading to lower demand (1) & lower profits (1).
  - Under absorption of overheads could lead to insufficient overhead being charged to a product (1). This means a lower price is charged to the customer (1) which fails to cover costs & reduces profit (1).
  - Under absorption of overheads could also lead to a lower selling price (1) leading to higher demand (1) & higher profits (1).

Under-absorption occurs when:	Over-absorption occurs when:
- Actual expenditure is more than budgeted expenditure	- Actual expenditure is less than budgeted expenditure
- Production is less than the planned level. In this case not enough overhead has been charged to production	- Actual production is more than the planned level. In this case too much overhead has been charged to production

- **Departmental overhead absorption rates to one factory-wide rate?**

- Easier to calculate
- Cheaper to calculate
- Some products may require more labour hour/machine hours
- Less accurate
- Different products may spend different time in each department.
- The overhead absorption rate should be chosen to reflect the activity of that department (1).
- If the department is machine-intensive then machine hours should be chosen / If the department is labour intensive then labour hours should be chosen (1)
- This should lead to a more accurate absorption of overheads (1) which in turn leads to a more accurate cost figure / selling price (1)

❖ identify & explain the uses & limitations of absorption costing.

- **Limitations of absorption costing:**

- It is more time consuming to calculate the overhead absorption rate & adjust for over / under absorption.
- It is more complicated to calculate & managers may need training.
- It is irrelevant in short term decision making as fixed costs don't change.

- Fixed costs relate to a period in time & so can be misleading to charge to production units.
  - The basis used to apportion & absorb overheads may be subjective.
- **Uses of absorption costing:**
- Often used to determine inventory values in accordance w/ International Financial Reporting Standards
  - It is also used to determine a profitable selling price that covers all costs of making each unit.
  - Recognises the fact that each unit produced must cover ("absorb") its share of fixed overheads
  - Adheres to the matching principle by making sure that revenue is matched to expenditure incurred in making that revenue instead of treating fixed overhead costs as period costs.
  - Recognises the fact that fixed overheads are essential for production.
  - Is more consistent w/ external reporting rules & regulations i.e. company laws & IFRSs
  - Produces profit amounts that fluctuate less when production is constant but sales fluctuate e.g. in businesses that have seasonal sales.
- **Advantages of absorption costing:**
- Takes acc. of fixed costs when determining product cost (1); as a result, is useful in setting a selling price for a product (1).
  - Avoids separating fixed costs from variable costs (1) which can be difficult & so lead to inaccuracies (1)
  - As it takes acc. of all costs it conforms to the matching principle (1) which requires costs to be matched to revenues for a period (1)
  - As it takes acc. of all costs (1) it is the recognised method for inventory valuation (1)
- **Drawbacks of using a budgeted overhead absorption rate**
- Estimated figures used may be inaccurate (1) leading to under / over absorption of overheads (1)
  - Over absorption of overheads may lead to prices being set too high (1) which may lead to loss of customers (1)
  - Under absorption of overheads may lead to prices being set too low (1) which would result in lower profits (1)

## 2.2.2 Marginal costing

❖ *understand the application of marginal costing.*

- **Marginal cost:** the cost of making an extra unit of output.
- It is based on the principle that an additional unit of production will only result in an increase in the variable costs & that the fixed costs will not be affected.
- Marginal cost of production is, therefore, the total of the variable costs of production

❖ *calculate the contribution of a product*

- **Contribution:** the difference between the selling price & the variable cost per unit of output. In total, it is also the difference between the total revenue & total variable costs
- **Contribution = Selling price per unit – total of variable costs per unit**

	<b>\$</b>
The selling price of a unit of VX/32 is	100
Variable costs per unit – direct materials	27
direct labour	32
royalties	8
Fixed costs per unit	17

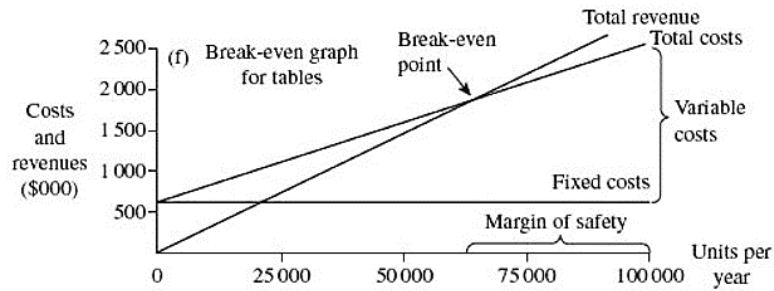
### Required

Calculate the contribution made by the sale of one unit of VX/29.

### Answer

$$\begin{aligned}
 \text{Contribution per unit} &= \text{Selling price per unit} - \text{Variable costs per unit} \\
 &= \$100 - \$67 (\$27 + \$32 + \$8) \\
 &= \$33
 \end{aligned}$$

❖ prepare a break-even chart



❖ calculate the break-even point, contribution to sales ratio & margin of safety

- **Units to be sold to reach target profit** =  $\frac{\text{Total fixed costs} + \text{profit required}}{\text{Contribution per unit}}$
- **Contribution to sales (c/s) ratio** =  $\frac{\text{Total contribution}}{\text{Total sales revenue}}$
- **Break-even point** =  $\frac{\text{Total fixed costs}}{\text{Contribution per unit}}$
- **Margin of safety** =  $\text{Actual/current production} - \text{break - even production}$

❖ explain the use & limitations of break-even charts

- **The uses of break-even charts:**
  - To determine breakeven point.
  - To show impact on profits of selling product at different prices.
  - To forecast costs & profits resulting from changes in sales volume.
  - To show the deviations of actual profit from anticipated profit relative profitability under conditions of high / low demand.
  - Identifies margin of safety (1)
  - Helps cost control by showing relative importance of fixed costs & variable costs (1)
  - Provides information in a concise/straightforward/easy to understand format (1)
- **The limitations of break-even charts:**
  - Some costs are not easily classified as fixed / variable.
  - Some costs are semi-variable.
  - It assumes fixed costs stay the same.
  - Straight lines can be misleading – discounts can cause curved lines.
  - A chart can be time consuming to prepare.
  - It assumes the selling price is constant at all levels of output.
  - It can be misleading for those w/ limited accounting knowledge.
  - Can only be applied to one product at a time

❖ Prepare a statement reconciling the reported profit using marginal costing & absorption costing

Rault Ltd		Marginal cost statement for the year ended 31 May 2015		Absorption costing statement for January 2015	
		\$	\$		
Revenue			950 000	Direct materials	56 000
Less	Variable costs			Direct labour	78 000
	Direct materials	(120 000)		Royalties	2 000
	Direct wages	(360 000)		<b>Prime cost</b>	<b>136 000</b>
	Factory expenses	(60 000)		Indirect materials	17 000
	Selling and distribution expenses	(56 000)		Indirect labour	34 000
	Administrative expenses	(16 000)	(612 000)	Other indirect costs	26 000
Total contribution			338 000	Depreciation	14 000
Less	Fixed costs			Total production cost	227 000
	Factory overheads	(110 000)		Selling and distribution costs	46 000
	Selling and distribution overhead	(45 000)		Administration costs	62 000
	Administrative overhead	(38 000)	(193 000)	Total cost	335 000
Profit for the year			145 000		

❖ identify the uses & limitations of marginal costing

- **The uses of marginal costing:**

- Costing 'special' / 'one off' opportunities
- Deciding whether to make / buy a product
- Choosing between competing alternative actions
- Employing a penetration / destroyer pricing strategy
- Calculating the break-even level of output

- **The limitations of marginal costing**

- It is only useful for short-term decision making
- Not all costs can be easily split into fixed costs & variable costs
- Under marginal costing, the fixed costs remain constant & variable costs vary according to the level of output. In reality, the fixed costs do not remain constant & the variable costs do not vary according to the level of output. In the long run all costs are variable.
- In the case of loss by fire, if inventory is valued using marginal costing, the full amount of loss cannot be recovered from the insurance company since no element of factory fixed overheads is included.
- The management should not base decisions using contribution alone. The contribution may vary if new techniques are followed in the production process.
- The technique assumes that production methods will remain constant. In practise, this is not the case. Investment in new machinery at the expense of reducing labour will change the cost structure completely.
- It is really only useful for a business which makes a single product. A company making several products will have difficulty in allocating fixed cost to each product w/ any degree of accuracy. This will make it difficult to calculate the break-even point for either a single product / the business as a whole.

❖ should businesses cater to special orders for a lower selling price?

Pros	Cons
Additional profit	Other customers may object on lower price being offered to this customer
Utilisation of spare capacity	
Less reliant only on one customer	Competitors may lower price & start price war
Small increase in fixed costs	
Positive contribution	

❖ calculate the effect of limiting factors on production.

The Laville Company manufactures four products. The products use the same type of materials and skilled labour. The following information is given:

	Product			
	P	Q	R	S
Selling price per unit (\$)	200	300	100	400
Maximum demand for product (units)	1 000	800	1 200	900
Material usage per unit (kg)	7	12	4	15
Labour hours per unit	3	4	2	6

Materials cost \$10.00 per kilogram; labour costs \$15.00 per hour.

**Required**

Prepare a statement showing the level of production for each product that would maximise the profits for the Laville Company if:

- a only 25 000 kilograms of materials are available
- b only 10 000 labour hours are available.

**Answer**

Contribution earned by each product	P	Q	R	S
	\$	\$	\$	\$
Selling price per unit	200	300	100	400
Marginal costs per unit	115	180	70	240
Contribution per unit	85	120	30	160

a

Contribution per kilogram of material used	\$12.14	\$10.00	\$7.50	\$10.67
Ranking	1	3	4	2

You can see that the Laville Company should produce as many of product P as possible. If there are still materials available, it should produce as many of product S as possible; then product Q and finally product R.

If Laville could produce all products:

they would produce	1 000	800	1 200	900
this would use	7 000 kg	9 600 kg	4 800 kg	13 500 kg

Since this is not possible:

they should produce	1 000	375	nil	900
this would use	7 000 kg	4 500 kg	nil	13 500 kg

This combination of products will maximise profits while only using 25 000 kilograms of materials.

b

Contribution per hour of labour used	\$28.33	\$30.00	\$15.00	\$26.67
Ranking	2	1	4	3

You can see that the Laville Company should produce as many units of product Q as possible; then produce as many units of product P as possible; then product S and finally product R.

If Laville could produce all products:

they would produce	1 000	800	1 200	900
this would use	3 000 hrs	3 200 hrs	2 400 hrs	5 400 hrs

Since this is not possible:

they should produce	1 000	800	nil	633
this would use	3 000 hrs	3 200 hrs	nil	3 798 hrs

This production pattern would maximise profits while only using 9 998 hours of scarce labour. (The company has to produce only 633 of product S since the next unit would be only two-thirds complete!)

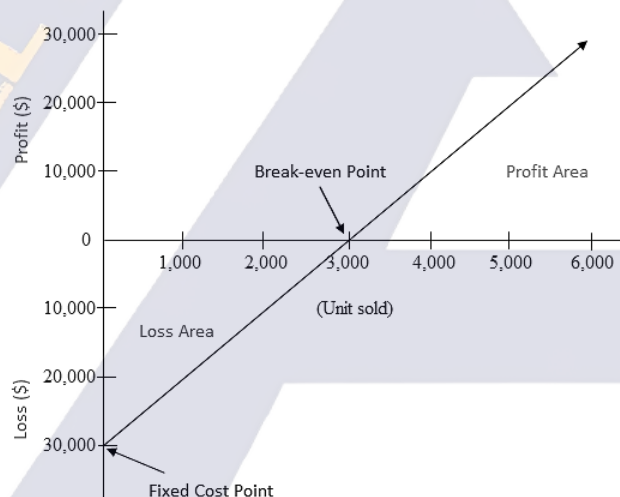
## 2.2.3 Cost–volume–profit analysis

❖ *identify & explain the advantages & limitations of cost–volume–profit analysis*

- **Advantages of cost-volume-profit analysis:**
  - Aids short-term decision making.
  - Identifies break-even point/margin of safety/project profit.
- **Limitations of cost-volume-profit analysis:**
  - It assumes that total fixed costs are constant.
  - It assumes variable costs per unit are the same.
  - It assumes the selling price per unit remains the same.
  - It assumes sales & production levels are the same.
  - It assumes product mix remains constant.
  - It ignores uncertainty in estimates of fixed costs & variable costs.
  - Some costs are difficult to classify as fixed / variable.

❖ *evaluate & interpret cost–volume–profit data & its value as a support for management decision making*

- **CPV analysis:**
  - It is a useful tool in short-term decision making
  - Examines the relationship that exists between sales volume, sales revenue, costs & profits
  - Shows how cost behaves at varying levels of output
  - Can be used in 'what if' analysis
  - Can help to provide answers to question on the likely outcome when a particular course of action is followed by the management, e.g. the effect on profit if more goods were sold at a reduced price.
- **Cost-volume-profit graphs:**
  - Depict CPV in a form that helps most people understand the information shown quickly & more effectively (but do remember that for decision-making purposes the use of calculations is much more accurate)
  - Show clearly the break-even point
  - Identify margin of safety
  - Show visually & clearly the impact that changes in sales volume has on profits.



- **Assumptions of cost-volume-profit analysis:**
  - Sales price per unit is constant
  - Total fixed costs are constant
  - Variable cost per unit is constant
  - All production is sold
  - If the company sells more than one product, the product mix remains constant
  - Costs are only affected as a result of changes in activity

❖ prepare costing statements using unit, job & batch costing principles

- **Unit costing:** the costing procedure to find the cost of a single unit of output (cost unit)
- **Job costing:** costing methods that calculates the cost of meeting a specific customer order / job.
- **Batch costing:** the costing procedure to find the cost of a batch of items produced

	\$	\$
Direct materials		3450
Direct wages – machine shop	300	
assembly shop	960	
paint shop	180	1440
Prime cost		4890
Factory overheads – machine shop (120 × \$4.50)	540	
assembly shop (240 × \$3.50)	840	
paint shop (40 × \$2.00)	80	1460
Factory cost		6350
Administration and selling overheads		1270
Total cost		7620
Selling price		9000
Profit		1380

❖ apply costing concepts to make business decisions & recommendations using supporting data.

- **Why profit calculated using marginal costing would be different to that calculated using absorption costing?**
  - Fixed overheads are treated as period costs under marginal costing (lower closing inventory value) but as a part of cost of production under absorption (higher closing inventory value)
  - Fixed overheads are written off in the period's ISs, fixed overheads carried forward as a part of inventory in absorption costing
- **Reasons to accept/reject order below quoted price (discounted price)**
  - The offer still provides a positive contribution/generates profit
  - This will result in increased overall profits for the business
  - The order will make use of existing spare capacity
  - Spare capacity could be used to manufacture goods w/ a better mark-up
  - Is this a one-off order / will the customer expect future orders at the same price?
  - Other customers could also want to buy at a reduced price
  - It could cause ill feeling w/ other customers
  - Will there be an increase in the fixed cost?
  - Will the temporary labour be available immediately/ existing workforce be willing to work overtime?
  - Will the product quality remain the same if temporary labour is used / do they have the necessary skills?
  - Will the morale of the existing workforce go down if temporary labour is employed?
- **Reasons for discontinuing a particular model**

Financial	Non-financial
All models make a positive contribution.	Discontinuing any model may result in loss of customers/sales.
If any model was discontinued fixed costs would be reallocated to the remaining models.	Would the workforce be fully employed on the remaining models?
Method of allocating fixed costs may be inappropriate.	Would employees need training to produce alternative models?
	Possible redundancies.
	Demotivated workforce.
	Adverse publicity.
	Discontinuing any model may result in loss of customers/sales.

- **Reasons for not changing variables in the break-even**
  - Although budgeted contribution is higher, the profit after the changes is lower (1), due to allocated fixed costs increasing – advertising & sales bonus. (1)
  - The margin of safety is lower (1) which means there is less of a buffer / comfort zone before product starts to make a loss. (1)
  - The break-even point is higher (1) which increases the risk (1) of product not making enough sales to cover fixed costs. (1)
- **Reasons for producing a quantity above the factory capacity**

Accept the offer	Not accept the offer
The company will make more profit in month/year than had been forecast (1).	The company will have to reduce its usual output (1) which could mean that some regular customers' orders are not fulfilled (1) leading to a possible long-term loss of their custom (1) & a loss of profit if the special offer is not repeated (1).
The company will be in full production (1) avoiding cancellation of orders for materials which might cause a deterioration in relationships w/ suppliers (1), avoiding laying off staff which could affect morale (1), avoiding machinery lying idle which could affect their efficiency (1)	The directors need to consider whether the order can be produced to the quality expected (1), whether the labour force have the appropriate skills for the products if they vary from the normal output (1) & whether the machinery is capable of producing the products if they vary from the normal output (1).

- **Optimum production plan – limited resources**

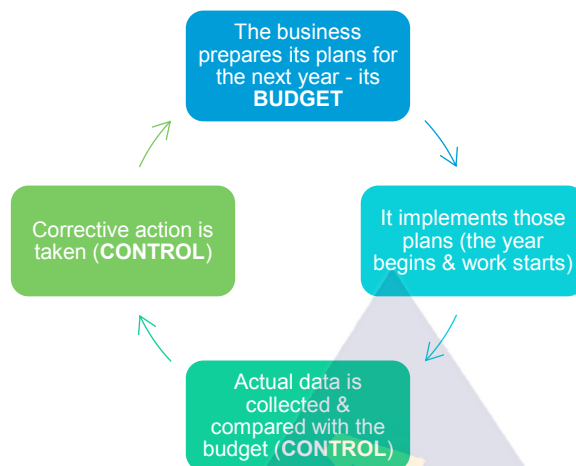
Reasons for agreeing	Reasons for disagreeing
The plan will ensure the factory makes the optimum profit	The company risks losing regular customers for Product A
This is because Product B has the higher contribution per \$1 of direct labour	As a result, in the longer term the profits of the company may be reduced if regular customers cannot be won back.
	Regular customers for Product A may also cancel their orders for Product B
	The directors need to consider how the suppliers of direct materials for Product A will react to a reduction in orders
	Will it be possible to continue to make usual orders w/ these suppliers when the problem is overcome?
	Trade discounts for ordering in bulk may be lost causing a decrease in the profitability of this unit

## 2.3 The application of accounting to business planning

- ❖ *understand the benefit to business planning by the use of accounting data.*
  - Price products competitively
  - Avoid 'firefighting' / avoid potential problems in the future
  - Assess any competition / markets for products
  - Estimate the likely future position of business – short term & long term
  - Identify areas of responsibility of managers
- ❖ *explain the need for a business to plan for the future*
  - Map the future
  - Support growth
  - Manage cash flow

❖ explain why organisations prepare budgets & the benefits to the planning process

- **Budget:** a plan of a future activity, usually expressed in financial terms



- **Uses & benefits of budgeting:**

- Formalize management's plans
- Ensures that all departments of the business are co-ordinated
- Future shortages of materials & cash can be indicated giving time to prepare plans for these shortages
- Commitment by management in all areas of the business is improved
- Ensures responsibility by the managers who prepared the budgets
- Improves control of business activities

❖ explain the advantages & disadvantages of budgetary control

- **The impact of the introduction of a system of budgetary control on the departmental managers**

- Managers could be involved in setting targets/budgets for their areas of responsibility (1)
- resulting in possible increase in motivation (1)
- If managers are not involved in setting targets/budgets motivation could be reduced (1)
- especially if targets are seen to be unachievable/unrealistic (1)
- Managers' efficiency could be improved (1) as a result of having clear objectives/targets (1)
- However, budgetary control might prove to be restrictive (1)
- resulting in otherwise beneficial opportunities being rejected by managers (1)

Advantages	Disadvantages
Assists w/ planning for the future	Budgets are an estimate & could be inaccurate
Compares budget & actual, identifying, variances enabling corrective action to be taken	Budget are time consuming & expensive to create & monitor
Helps to monitor performance	Could lead to conflict between departments
Enables delegation to departments	Could demotivate employees
Assists w/ decision making	May have to employ specialist staff
May motivate staff	Budget may be set an unrealistic level
Helps w/ responsibility accounting / enables assessment of managers	Does not take acc. of unforeseen circumstances
	Can restrict staff innovation

## Key

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| <ul style="list-style-type: none"> <li>- SOFT: Statement of Financial Position</li> <li>- IS: Income Statement</li> <li>- CA: Current Asset</li> <li>- CL: Current Liability</li> <li>- NCA: Non-Current Asset</li> <li>- NCL: Non-Current Liability</li> </ul> | <ul style="list-style-type: none"> <li>- Acc.: Account</li> <li>- TP: Trade Payables</li> <li>- TR: Trade Receivables</li> <li>- TB: Trial Balance</li> <li>- P/L: Profit or Loss</li> </ul> |
|---|--|