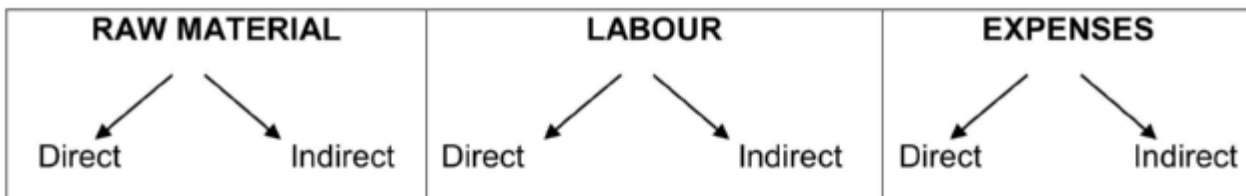


1 - Manufacturing Accounts

Costs Classification



Prime cost= Direct Material + Direct Labor + Direct Expense

Overheads = Indirect Material + Indirect Labor + Indirect Expense

Overheads

- Production / Factory / Manufacturing Overheads
- Non Production / Non Factory / Non Manufacturing Overheads (E.g. Selling, Marketing, administration, Distribution, Office, Finance, R and D etc)

Building up of Costs

Direct Material	XX
Direct Labor	XX
Direct Expenses	<u>XX</u>
Prime Cost	XX
Add: Production Overheads	<u>XX</u>
Production Costs	XX
Add: Non Production Overheads	<u>XX</u>
Total Cost	<u>XX</u>

Direct costs

Direct cost are cost that can be traced / identified easily in the product or service being manufactured e.g. direct material, direct labor& direct expenses the sum of all the direct costs is known as the prime cost

Examples

- Cost of raw materials including carriage inwards on those raw materials.
- Labor directly involved in producing a unit or providing a service
- Hire of special machinery for a job or royalty expense

Indirect cost

indirect costs are costs that cannot be easily traced / identified in the product or service being manufactured or we treat them indirect because costs are negligible e.g. indirect material, indirect labor& indirect expenses the sum of all the indirect costs is known as the overheads

Examples

- wages of cleaners
- wages of crane drivers
- rent of a factory
- depreciation of plant and machinery
- costs of operating forklift trucks
- factory power
- factory lighting

Administration expenses

'Administration expenses' consist of such items as managers' salaries, legal and accountancy charges, the depreciation of accounting machinery and secretarial salaries.

Selling and distribution expenses

'Selling and distribution expenses' are items such as sales staff's salaries and commission, carriage outwards, depreciation of delivery vans, advertising and display expenses.

Financial charges

'financial charges' are expense items such as bank charges, discounts allowed and lease costs

Manufacturing Account

An account or statement where a company calculates cost of production/manufacturing cost. This helps in future decision making by comparing per unit cost with same products available in the market.

GOODS / INVENTORY:

An item of inventory could be in three different stages.

1. **Raw material** (product could be in raw shape like wood, sand, cement, nails etc)
2. **Work in process** (when good are partly completed, needs more work to be done to complete).
3. **Finished goods** (when product is fully completed, ready for sale)

ARD Textiles
Manufacturing Account For the year ended Dec 31, 2018

	\$	\$
Direct Raw material consumed:		
Opening inventory of RM	XX	
Add: Purchases of RM	XX	
Less: Purchases return RM	(XX)	
Add: Carriage Inwards RM	XX	
Closing inventory of RM	(XX)	
Direct Raw material consumed		XX
Add: Direct labor/ Factory wages		XX
Add: Direct Expense / Royalty		XX
Prime Cost		XXX
Add: Factory Overheads / Indirect Cost		
Salaries & wages (Factory Supervisor/Mgt salary)	XXX	
Insurance (factory)	XXX	
Indirect overheads (Factory)	XXX	
Heat and lighting (Factory)	XXX	
Rent (Factory)	XXX	
Depreciation (Factory equipment)	XXX	
Sundry expenses (factory)	XXX	XXX
		XXX
Add: Opening Work in Progress	XXX	
Less: Closing Work in Progress	(XXX)	XX(XX)
Production / Manufacturing cost		XXX
Add: Factory Markup		XX
Market Value of Goods Manufactured		XXX

Why Factory should charge a profit

- Market or transfer price reflects the external purchase price which helps in make v buy decision
- Profit is allocated between manufacturing and trading operations
- Help to give some credit to factory personnel because generally goods bought from outside cost even more.

Why Factory should “NOT” charge a profit

- Overall profitability of the business does not change
- Factory profit would be unrealistic unless based on market prices

ARD Textiles
Income Statement For the year ended Dec 31, 2018

	\$	\$
Sales Revenue (Finished Goods)		XXX
Less: Cost of Sales		
Opening Inventory of (FG)	XXX	
Add: Market Value of Goods Manufactured	XXX	
Purchase of finished goods (FG)	XXX	
Less: Purchases return (FG)	(XXX)	
Closing inventory (FG)	(XXX)	
Cost of Sales		(XXX)
Gross profit		XXX
Add: Other Income		
Interest received	XXX	
Decrease in Provision for doubtful debts	XXX	
Discount received	XXX	XXX
Less: Non-Manufacturing Overheads		
Heat and lighting (Office)	XXX	
Office salaries	XXX	
Rent (Office)	XXX	
Depreciation (Office Related Assets)	XXX	
Carriage Outward / Distribution Costs	XXX	
Bad debts	XXX	
Increase in Provision for doubt debts	XXX	
Interest expense / financial cost	XXX	(XXX)
Profit from Trading		XX
Add: Factory Realized Profit		
Factory Profit Markup	XXX	
Less: Increase in PUP / Add: Decrease in PUP	(XX)	XXX
Overall Net Profit		XXXX

Provision for Unrealized Profit Account

	\$		\$
Income Statement (Realized Profit)	XXX	Balance b/d	XX
Balance c/d	XX	Factory Profit	XXX
	<u>XXXX</u>		<u>XXXX</u>

ARD Textiles
Statement of Financial Position as at 31 December 2018

Assets	\$	\$	\$
Non-Current Assets	Cost	Acc Dep	NBV
Land	XXX	-	XX
Building	XXX	(XX)	XX
Equipment	XXX	(XX)	XX
			XXX
Current Assets			
Inventory			
Raw Material		XX	
Work in Progress		XX	
Finished Goods	XX		
Less: Unrealized Profit	(X)	XX	
Trade Receivables / Debtors	XXX		
Less: Provision for doubtful debts	(XXX)	XXX	
Prepaid Expense		XXX	
Accrued Income		XXX	
Bank		XXX	
Cash		XXX	XXX
Total Assets			XXX
Capital and Liabilities			
Opening Capital		XXX	
Add Profit for the year / Less (Loss)		XX/(XX)	
Less: Drawings		(XXX)	XXX
Non Current Liabilities			
6% Bank Loan 2020			XXX
Current Liabilities			
Trade payables / Creditors		XXX	
Bank O/D (Over Draft)		XXX	
Accrued Expenses		XXX	
Prepaid Income		XXX	XXX
Total Capital and Liabilities			XXX

Exam Focused theory Questions

Q. Why do we calculate manufacturing cost?

A. Manufacturing cost give us the cost incurred on producing/Manufacturing goods. We calculate it because we would like to have per unit cost, which helps us in comparing cost with the same product available in the market. It helps us in future decision making, whether to continue production process or not it also helps us in controlling cost and other overheads.

Q. Explain the term Prime cost?

A Prime cost is the primary cost to produce any item/product/good without which it cannot be produced. It is the initial cost of production. Prime cost is the direct cost of production it includes direct raw material, direct labor and direct expense or we can say that , it we add all direct cost we can have the value of prime cost.

Q. Explain the two ways in which the going concern principle affects the value of work in progress?

A. Going concern principle states that the business will continue its operation in the foreseeable future.

1. Company uses the going concern principle because we expect the business to continue for the foreseeable future.
2. This means that stocks should be valued to reflect its normal use in the business and not the need to sell it immediately or auction basis.
3. Going concern value may be higher or lower as work in progress may require finishing, incurring additional cost.

Explain two ways in which the Prudence (Conservation) principle affects the value of work in progress.

A. Prudence concept states that we should record loss if we foresee it in the future, but profits should never be recorded unless it would actually realize.

1. Used to avoid overstating inventory value
2. Stock should be recorded at cost or net realizable value, whichever is lower.
3. NRV allows for additional work on WIP to make it of practical value.
4. A prudent approach avoids overstating profits.

A prudent valuation will reflect any work in manufacturing and work done on the RM converting them to WIP.

1 - Manufacturing Accounts

Q1. Asterix plc, a manufacturing company, has extracted the following balances from its books of account for the year ended 30 April 2012:

	\$000
Revenues	6 500
Purchases of raw materials	1 450
Carriage inwards	130
Carriage outwards	75
Direct labour	1 675
Factory overheads	1 350
Office overheads	1 025
Inventories at 1 May 2011:	
Raw materials	140
Work in progress	165
Finished goods (at transfer price)	330

Additional information:

- 1 Factory overheads of \$70 000 are accrued at 30 April 2012.
- 2 Office overheads of \$35 000 have been prepaid at 30 April 2012.
- 3 Depreciation for the year on the non-current assets totalled \$150 000 and this is to be split between the factory and the office in the ratio 2:1.
- 4 Completed production is transferred at a mark-up on cost of 20%.
- 5 Inventories were valued on 30 April 2012 as follows:

	\$000
Raw materials	235
Work in progress	320
Finished goods (at transfer price)	438

REQUIRED

- (a) Prepare a manufacturing account and income statement for the year ended 30 April 2012. [26]
- (b) Prepare an extract from the statement of financial position at 30 April 2012 to show all inventories. [6]

Q2. Nathan Akrill is a sole trader who has successfully run a manufacturing business for many years. His business manufactures one product, the squam.

On 1 January 2011 there were 1000 squams in inventory. During the year 10 318 squams were produced by the factory and transferred to the sales department. On 31 December 2011 there were 1240 squams in inventory. Nathan Akrill uses the FIFO method of inventory valuation.

Production is transferred from the factory to the sales department at cost plus 40%.

Unfortunately the book-keeper was taken ill at the year end and Nathan Akrill decided he would have to produce his financial statements himself. He did not know how to value the inventory of finished goods at that date. Therefore he decided to value each squam at the same value as had been used on 1 January 2011.

Nathan Akrill produced the following:

Income statement for the year ended 31 December 2011			
	\$	\$	\$
Revenue			880 000
Inventory at 1 January 2011			
Raw materials		31 000	
Finished goods		<u>58 800</u>	
		89 800	
Purchases of raw materials		<u>261 000</u>	
		350 800	
Inventory at 31 December 2011			
Raw materials	46 400		
Finished goods	<u>72 912</u>	<u>119 312</u>	
Cost of sales			<u>231 488</u>
Gross profit			648 512
Manufacturing wages		166 000	
Supervisory wages		42 800	
Factory rent		36 000	
Office rent		21 000	
Depreciation of factory machinery		13 800	
Depreciation of office equipment		2 900	
Direct expenses		9 200	
Carriage on raw materials		2 500	
Administrative and selling expenses		<u>201 000</u>	
			<u>495 200</u>
Profit for the year			<u>153 312</u>

Statement of Financial Position at 31 December 2011

	\$	\$	\$
Non-current assets			570 000
Current Assets			
Inventory			
Raw materials	46 400		
Finished goods	<u>72 912</u>		
		119 312	
Trade receivables		96 200	
Bank		<u>11 000</u>	
		226 512	
Current liabilities			
Trade payables		<u>(84 100)</u>	
			<u>142 412</u>
			<u>712 412</u>
Capital			
Balance at 1 January 2011			622 300
Profit for the year			153 312
Drawings			<u>(80 000)</u>
			<u>695 612</u>

REQUIRED

- (a) Prepare, for the year ended 31 December 2011:
- (i) the manufacturing account; [10]
 - (ii) the provision for unrealised profit account; [8]
 - (iii) a corrected income statement. [13]
- (b) Prepare a corrected statement of financial position at 31 December 2011. [7]
- (c) Explain your treatment of finished goods in the inventory valuation. [2]

[Total: 40]

Q3. Pakenham Ltd has a financial year end of 30 April each year. The manufacturing account showed the following:

Manufacturing account for the year ended 30 April 2010		
	\$	\$
Inventory (stock) of raw materials at 1 May 2009		12 000
Purchases of raw materials		162 000
Inventory (stock) of raw materials at 30 April 2010		<u>(18 000)</u>
		156 000
Direct labour		160 000
Prime cost		<u>316 000</u>
Factory overheads		
Rent and rates	20 000	
Electricity	72 000	
Other	<u>12 000</u>	104 000
Factory cost of goods produced		<u>420 000</u>
Factory profit		<u>63 000</u>
		<u>483 000</u>

Other information is as follows:

- 1 During the year ended 30 April 2010 sales were \$602 000 and selling and administration costs were \$39 000.
- 2 Rent and rates are allocated on the basis of floor space. The factory occupies 100 m² and the office and showroom 150 m².
- 3 Electricity is allocated on the basis of usage with 80% being used in the factory.
- 4 Pakenham Ltd maintains a provision for unrealised profit account. The balance on this account was \$4500 on 1 May 2009 and was \$4800 on 30 April 2010. The rate of factory profit had remained constant during the year.

REQUIRED

- (a) Prepare an income statement (trading and profit and loss account) for the year ended 30 April 2010. [12]
- (b) Calculate the value of inventory (stock) for inclusion in the balance sheet at 30 April 2010. [4]

Q4. Helen Tong is a manufacturer of one type of high quality office desk.

Helen provides the following information from her trial balance at 31 December 2007:

	\$
Sales	1 750 000
Purchases of raw materials	230 400
Factory overheads	215 000
Manufacturing royalties	17 500
Direct wages	358 210

Additional information:

- 1 4000 desks were manufactured during the year ended 31 December 2007.
- 2 Helen transferred the value of these desks during the year from her manufacturing account to her trading account at a total price of \$1 126 140. This represents a mark up over cost, equivalent to the price Helen would have had to pay if she had purchased the desks from an outside supplier.
- 3 Helen maintains stocks of raw materials at a constant value of \$10 000 and stocks of work in progress at a constant value of \$12 500.
- 4 At 31 December 2006 completed goods had been transferred from the manufacturing account to the trading account at cost plus 29 %. Stocks of finished goods were valued at transfer price of \$18 769 at 31 December 2007.
- 5 An extract from Helen's balance sheet at 31 December 2006 shows:

	\$
Stocks at cost – Raw materials	10 000
Work in progress	12 500
Finished goods	12 300

- 6 At 31 December 2007:

Manufacturing royalties paid in advance amounted to \$400.

Direct wages remaining unpaid amounted to \$1290.
- 7 80% of factory overheads are fixed costs; the remainder are variable costs.

REQUIRED

- (a) Prepare a manufacturing account for the year ended 31 December 2007. [6]
- (b) Prepare a trading account for the year ended 31 December 2007. [9]
- (c) Prepare a provision for unrealised profit account for the year ended 31 December 2007. [10]
- (d) Calculate in units the margin of safety achieved by the factory in 2007. [9]
- (e) Calculate the value of the goods transferred from the factory at the break-even level of output. [3]
- (f) Explain **one** reason why a manufacturing business might continue to manufacture goods despite the fact that it may be cheaper to purchase the goods from an outside supplier. [3]

[Total: 40]