CHAPTER 17: MANUFACTURING ACCOUNT

Prime cost (Direct cost): Prime costs are all the direct costs of a product i.e. those costs that can be traced conveniently to each unit. These include direct materials cost, direct expenses (royalties, patents, copyrights) and direct labor cost.

Factory overheads (indirect costs): Factory overhead is the costs incurred during the manufacturing process, not including the costs of direct labor and direct materials. Factory overhead included all costs related to factory other than direct costs.
Examples of factory overhead costs are:

- Production supervisor salaries
- Factory rent
- Factory utilities
- Factory building and plant depreciation
- Equipment maintenance
- Factory indirect materials (packing materials)
- Factory indirect wages or factory wages

1) **Manufacturing account**
2) **Income Statement**
3) **Statement of financial position**

ABC
Manufacturing Account
For the year ended___________

	$	$	$
<u>Raw material consumed:</u>			
Opening inventory of raw material (direct material)		XXX	
Purchases of R.M.	XXX		
Carriage inward	XXX		
Return outward	(XXX)	XXX	
Closing inventory R. M.		(XXX)	XXX
Direct factory wages/manufacturing wages/production wages			XXX
Direct factory expenses (royalties, patents)			XXX
Prime cost			XXX
<u>Factory Overheads:</u>			
Factory wages (indirect wages)		XXX	
Supervisor wages		XXX	
Factory expenses		XXX	
Factory/machine repairs		XXX	
Factory/machine depreciation		XXX	
Factory bills		XXX	
Factory insurance		XXX	
All factory related expenses		XXX	
Indirect material consumed (packing material) (opening inventory + purchases - closing inventory)		XXX	XXX
Total factory cost			XXX
Opening work in progress		XXX	
Closing work in progress		(XXX)	XX/(XX)
Cost of production (finished goods cost)			XXX

ABC

Income Statement For The Year Ended________________

	$	$	$
Revenue		XXX	
Return inward		(XXX)	XXX
<u>Cost of sales</u>			
Opening inventory of finished goods		XXX	
Production cost	XXX		
Purchases of finished goods	XXX		
Drawings of goods by owner	(XXX)	XXX	
Closing inventory of finished goods		(XXX)	(XXX)
Gross profit			XXX
<u>Other incomes</u>			
Discount received		XXX	
Decrease in provision for bad debts		XXX	XXX
			XXX
<u>Expenses</u>			
All Selling, admin, office expenses which are not recorded in manufacturing account		XXX	
Increase in provision for doubtful debt		XXX	
Bad debts		XXX	
Depreciation of office equipment		XXX	
Depreciation of motor vehicles		XXX	
Carriage outward		XXX	(XXX)
Profit for the year			XXX

ABC
Statement Of Financial Position
As At ___________________________

	$ Cost	$ Provision for depreciation	$ Net book value
Non current assets			
Intengible:			
Goodwill	XXX		XXX
Patents and trade marks	XXX		XXX
Tengible:			
Premises, land and building or leasehold land and building	XXX	(XXX)	XXX
Machinery, Equipment and plant	XXX	(XXX)	XXX
Furniture, fixtures and fittings	XXX	(XXX)	XXX
Moto vehicles and cars	XXX	(XXX)	XXX
			XXX
Current assets			
Inventory (closing)			
-Raw material	XXX		
-Indirect material (packing material)	XXX		
-Work in progress	XXX		
-Finished goods	XXX	XXX	
Trade receivables	XXX		
Provision for doubtful debt	(XX)	XXX	
Other receivables (prepayments of expenses or accruals of incomes)		XXX	
Bank		XXX	
Cash		XXX	XXX
			XXX
Financed by:			
Equity		XXX	
Profit for the year		XXX	
Drawings (trial balance fig + goods drawings)		(XXX)	XXX
Non current liabilities:			
Bank loan			XXX
Current liabilities:			
Trade payables		XXX	
Other payables (accrued expenses + prepaid incomes)		XXX	
Bank overdraft (credit balance)		XXX	XXX
			XXX

Practice Questions:

Q1: The following balances were extracted from the books of Patricia Chin on 31 March 2013.

	$
Premises	67 000
Fixtures and fittings (cost)	20 000
Motor vehicle (cost)	18 000
Provisions for depreciation:	
Premises	2 680
Fixtures and fittings	9 600
Motor vehicle	11 520
Revenue	119 140
Purchases	60 200
Purchases returns	2 900
Inventory at 1 April 2012	5 430
Wages	20 960
General expenses	9 100
Insurance	12 600
Motor vehicle expenses	5 670
Discount allowed	1 428
Discount received	884
Trade receivables	7 546
Trade payables	4 920
Provision for doubtful debts	800
Bank overdraft	2 330
7% Bank loan (repayable 30 June 2018)	30 000
Capital	56 000
Drawings	12 840

Additional information

1 Inventory at 31 March 2013 was valued at $4200.

2 Insurance relates to a period of fourteen months to 31 May 2013.

3 A motor vehicle repair bill $225 was owing at 31 March 2013.

4 Bad debts of $246 are to be written off.

5 During the year Patricia took $800 from the bank for personal use.
No record of this was made in the books.

6 A purchase of fixtures and fittings during the year, $2000, had been recorded in the general expenses account.

7 Premises are depreciated at 2% per annum on cost.
Fixtures and fittings are depreciated at 8% per annum on cost.
Motor vehicles are depreciated at 20% per annum using the diminishing (reducing) balance method.

8 The provision for doubtful debts is to be maintained at 6% of trade receivables.

REQUIRED

(a) Prepare the income statement for the year ended 31 March 2013.
(b) Prepare the balance sheet (statement of financial position) at 31 March 2013.

Q2: Qadar Limited is a manufacturing business. The following information is available for the month of April 2014.

	$
Inventory at 1 April 2014:	
Raw materials	10 830
Work in progress	12 700
Finished goods	25 800
Factory wages	60 690
Office wages	24 750
Purchases of raw materials	80 670
Depreciation of factory machinery	7 000
Depreciation of office equipment	5 000
Rent of factory building	2 000
Rent of office building	1 000
Royalties	7 500
Factory management salaries	10 750
Office management salaries	32 000
Revenue	290 450
Insurance	1 250
General expenses	8 000

Additional information

1 Inventory at 30 April 2014:

Raw materials	12 400
Work in progress	9 980
Finished goods	24 700

2 Insurance is to be apportioned 80% to the factory, 20% to the office.

3 General expenses: $5000 relate to the factory and $3000 to the office.

REQUIRED

Prepare the manufacturing account of Qadar Limited for the month ended 30 April 2014.

Q3: The following balances were extracted from the books of Miral, a manufacturer, on 31 July 2012:

	$	
Factory equipment (cost)	160 000	
Office equipment (cost)	40 000	
Provisions for depreciation:		
Factory equipment	56 000	
Office equipment	26 000	
Office equipment disposal account	500	Dr
Bank	9 700	Dr
Equity	200 000	
Inventory at 1 August 2011:		
Raw materials	26 000	
Work-in-progress	36 000	
Finished goods	48 000	
Purchases of raw materials	183 000	
Direct factory expenses	38 000	
Indirect factory expenses	19 700	
Production wages	164 500	
Rent and rates	22 000	
Production management salaries	63 000	
Office wages and salaries	69 500	
Revenue	680 000	
Marketing expenses	27 850	
Distribution costs	62 000	
General office expenses	6 700	
8% Loan – repayable 31 December 2025	35 000	
Loan interest paid	2 100	
Provision for doubtful debts	3 000	
Trade receivables	75 000	
Trade payables	53 550	

Additional information at 31 July 2012:

1 Inventory was valued as follows:

	$
Raw materials	29 000
Work-in-progress	40 000
Finished goods	55 000

2 Production wages, $6500, were accrued. Marketing expenses, $1350, were prepaid.

3 Rent and rates are to be apportioned on the basis of area occupied. Three-quarters of the area is occupied by the factory and one-quarter by the administration.

4 Contained within the office wages and salaries is $8000 taken by Miral. He also took finished goods for his own personal use, $1500.

5 Depreciation is to be charged as follows:
Factory equipment at 20% per annum using the diminishing (reducing) balance method, Office equipment at 10% per annum on cost using the straight-line method.

6 The provision for doubtful debts is to be maintained at 6% of trade receivables.

REQUIRED

(a) Prepare the manufacturing account for the year ended 31 July 2012. Show clearly the prime cost and cost of production.

(b) Prepare the income statement for the year ended 31 July 2012.

(c) Prepare the Statement of financial position at 31 July 2012.

Q4: Noor is a manufacturer. The following balances were extracted from his books on 31 July 2016.

	$	
Equity	80 000	
Drawings	20 000	
Machinery (cost)	125 000	
Office fixtures (cost)	55 000	
Provisions for depreciation:		
Machinery	75 000	
Office fixtures	16 500	
Bank	27 700	Dr
Purchases of raw materials	132 500	
Inventory at 1 August 2015:		
Raw materials	15 000	
Work in progress	31 400	
Finished goods	40 000	
Revenue	505 000	
Royalties	15 000	
Indirect factory expenses	12 750	
Factory wages	90 800	
Insurance	6 200	
Rent	11 000	
Production managers' salaries	38 250	
Office wages and salaries	56 000	
Selling expenses	19 600	
Distribution costs	31 500	
Sundry office expenses	19 800	
8% Loan (repayable 31 May 2024)	60 000	
Loan interest paid	3 500	
Provision for doubtful debts	1 500	
Trade receivables	58 000	
Trade payables	71 000	

Additional information at 31 July 2016

1 Inventory was valued as follows:

	$
Raw materials	17 500
Work in progress	26 000
Finished goods	42 500

2 Sundry office expenses prepaid $1400.

3 Insurance included a payment of $4800 for the year ended 31 October 2016.

4 Insurance and rent are to be apportioned 80% to the factory and 20% to the office.

5 Depreciation is to be charged as follows:

(i) machinery at 20% per annum using the diminishing (reducing) balance method

(ii) office fixtures at 10% using the straight-line method.

6 Noor took $7500 of finished goods for his own use.

7 A debt of $3000 was considered irrecoverable. A provision for doubtful debts is to be maintained at 4%.

REQUIRED

(a) Prepare the manufacturing account for the year ended 31 July 2016.
(b) Prepare the income statement for the year ended 31 July 2016.
(c) Prepare the statement of financial position at 31 July 2016.

Q5: Wang Yee is a manufacturer. The following balances were extracted from his books on 31 January 2010.

	$
Inventories (stocks) 1 February 2009	
Raw materials	14 700
Work in progress	23 570
Finished goods	35 000
Purchases of raw materials	75 600
Purchases of finished goods	15 500
Direct factory wages	62 140
Rent	28 000
Factory management salaries	31 500
Office salaries	41 600
Revenue (sales)	342 500
Revenue (sales returns)	1 250
Distribution costs	28 650
Sundry office expenses	9 870
Non-current liability (8% loan – repayable 31 December 2015)	40 000
Finance costs (loan interest) paid	2 400
Property (land and buildings) (cost)	80 000
Plant and machinery (cost)	90 000
Office equipment (cost)	30 000
Provision for depreciation of plant and machinery	32 000
Provision for depreciation of offi ce equipment	12 000
Provision for doubtful debts	1 550
Trade receivables (debtors)	45 000
Trade payables (creditors)	60 700
Cash (bank)	33 030 Cr
Equity	110 000
Drawings	17 000

Additional information:

1 Inventories (stocks) at 31 January 2010 were valued as follows:

	$
Raw materials	16 250
Work in progress	18 780
Finished goods	32 500

2 At 31 January 2010

Direct factory wages, $1 120, were accrued.

Sundry offi ce expenses, $630, were prepaid.

3 Rent is to be apportioned on the basis of area occupied. Three fifths of the area is occupied by the factory and two fifths by the offices.

4 Depreciation is charged on plant and machinery at 20% per annum using the diminishing (reducing) balance method.

5 Office equipment is depreciated using the straight-line method at 20% on cost. Office equipment, $24 000, was purchased on 31 July 2006.
Additional offi ce equipment, $6 000, was purchased on 30 September 2009.
No other changes in non-current (fi xed) assets occurred in the year ended 31 January 2010.
Depreciation is calculated for the time assets are held in the business.

6 The provision for doubtful debts is to be maintained at 4% of trade receivables (debtors).

REQUIRED

(a) Prepare the manufacturing account of Wang Yee for the year ended 31 January 2010. Show clearly the cost of raw materials consumed, prime cost and cost of production.

(b) Prepare the income statement (trading and profi t and loss accounts) of Wang Yee for the year ended 31 January 2010.

(c) Prepare the Statement of financial position of Wang Yee at 31 January 2010.

Q6: Yip Sin is a manufacturer. The following balances were extracted from the books on 30 April 2011.

	$
Inventory at 1 May 2010	
Raw materials	20 900
Work in progress	30 800
Finished goods	40 750
Purchases of raw materials	147 200
Royalties paid	10 000
Direct factory wages	85 960
Factory indirect expenses	23 450
Rent	30 000
Factory management salaries	36 000
Office salaries	28 500
Revenue	450 000
Advertising	20 940
Distribution costs	18 650
General office expenses	11 300
6% Loan – repayable 31 December 2020	50 000
Loan interest paid	1 500
Plant and machinery (cost)	75 000
Office equipment (cost)	24 000
Provisions for depreciation	
Plant and machinery	25 000
Office equipment	9 000
Provision for doubtful debts	2 400
Trade receivables	64 000
Trade payables	61 750
Bank	4 200 Dr
Equity	100 000
Drawings	25 000

Additional information:

1. Inventory at 30 April 2011

	i. $	
ii. Raw materials		28 100
iii. Work in progress		34 250
iv. Finished goods		42 350

2. At 30 April 2011
   a. Direct factory wages, $4 040, were accrued.
   b. Advertising, $1 700, was prepaid.
3. Rent is to be apportioned four fifths to the factory and one fifth to the administration.
4. A purchase of office equipment, $2 000, had been debited in error to the general office expenses account. No entries have been made in the books to correct the error.
5. Depreciation is to be charged as follows:
   Factory plant and machinery at 20% per annum using the diminishing (reducing) balance method. Office equipment at 10% on cost using the straight-line method.
   A full year's depreciation is to be charged on all non-current assets owned at the end of the year.
6. The provision for doubtful debts is to be maintained at 5% of trade receivables.

REQUIRED

(a) Prepare the manufacturing account of Yip Sin for the year ended 30 April 2011. Show clearly the prime cost and cost of production.

(b) Prepare the income statement of Yip Sin for the year ended 30 April 2011.

(c) Prepare the statement of financial position of Yip Sin at 30 April 2011.