Lecture

IAQS | INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Class: MSc

Subject : Business Finance

Subject Code:

Chapter: Unit 3 Chapter 4(Part 1)

Chapter Name: Management Accounting

Today's Agenda

1. Rules of accounting

2. Trial balance
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    2. Cost of goods sold

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4. Capital reserves

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6. Revaluation reserve

6. Retained earnings

1 Rules of Accounting

- Debit what comes in and Credit what goes out
- Debit the receiver and credit the giver
- Debit – expenses and losses and Credit – Incomes and Gains

Dual Concept of Accounting mentions that recording a particular transaction should have an impact on two simultaneous accounts but inverse in nature

****** Dr = Cr ******

1.1 Structure of Accounting

1. Journal Entry

Example: **A** purchases goods from B payable after 30 days

Day 0 – Purchase Date 100
Purchase A/c – dr
To B A/c (Trade Payables)

Day 30 – Settlement Date
B A/c – dr (Trade Payables will reduce)
To Cash / Bank

1.1 Structure of Accounting

2. Ledger Posting

Purchase Ledger
+100

B A/c (Trade Payables) Ledger
+100 –100

Cash / Bank Ledger
–100

Net Figure – 0

2 Trial Balance

The statement of profit or loss and statement of financial position are prepared from the underlying bookkeeping records. All transactions are recorded during the year and are entered into a double entry bookkeeping system. This generates a table called a trial balance.

Debit = Credit

Debit = +ve values
Credit = -ve values
Debit + Credit = 0

2.1 Component in Trial Balance

As an example, assume that the following balances have been extracted from the books of JK plc, as at 31 March 20X1:

	£000	Exps / Income / Asset / Liability / Equity (Dr / Cr)
Administrative expenses	150	Exp (Dr)
Advertising	70	Exp (Dr)
Cash at bank	10	Asset (Dr)
Trade payables (Creditors)	45	Liability (Cr)
Trade receivables (Debtors)	115	Asset (Dr)
Directors' remuneration	75	Exp (Dr)
Interest on long-term loans	4	Exp (Dr)
Inventory at 31 March 20X0	130	----------
Investment income	18	Income (Cr)
Investments (short-term)	350	Asset (Dr)
Long-term loans	200	Liability (Cr)
Ordinary dividend paid	30	Expense (Dr)
Ordinary share capital, issued and fully paid	700	Equity (Cr)
Plant and machinery – cost	210	Asset (Dr)
Plant and machinery – depreciation at 31 March 20X0	95	

2.1 Component in Trial Balance

Premises – cost	950
Premises – depreciation at 31 March 20X0	20
Purchases	600
Retained earnings at 31 March 20X0	236
Sales (Revenue)	1,760
Shareholder reserves	50
Wages and salaries – administrative staff	160
Wages and salaries – manufacturing staff	190
Wages and salaries – sales staff	80

Asset (Cr) – reducing your Asset Value
Asset (Dr)
Dep / Asset (Cr) – reducing your Asset Value
Expense (Dr)
~~Asset (Dr)~~ ~~Income (Cr)~~ Equity (Cr)
Income (Cr)
Equity (Cr)
Expense (Dr)
Expense (Dr)
Expense (Dr)

Additional information:

1. Inventory at 31 March 20X1 was valued at £185,000.
2. Provision is to be made for administrative expenses owing at 31 March 20X1 amounting to £12,000.
3. Premises are to be depreciated at the rate of 2% on cost, and plant and machinery at 25% reducing balance.
4. Advertising paid in advance at the end of the year amounted to £9,000.
5. Corporation tax based on the year's profit is estimated at £15,000.
6. The company's ordinary share capital is 700,000 £1 ordinary shares, fully paid.

2.2 Cost of Goods Sold

P&L Statement	Qty	Rate	Amount
Sales	25	40	Rs. 1000
Cost of Goods Sold	5	20	Rs. 700
	20	30	
Profit / Loss			**Rs. 300**

Opening Stock (Start of the FY) **5 units @ Rs 20 = Rs. 100**
(+) Purchases **45 units @ Rs 30 = Rs. 1350**
(–) Closing Stock (End of the FY) **25 units @ Rs 30 = Rs. 750**

Cost of Goods Sold (Matching Concept) ***Rs. 700***

3 Depreciation definition

Depreciation is defined as the measure of the wearing out, consumption or other reduction in the useful economic life of a non-current asset, whether arising from:
- the passage of time, or
- obsolescence through technological or market changes.

1. It's a Charge
2. On a year-on-year basis (Non-Current / Long Term Asset)
3. For normal wear and tear
4. On the value of an long term asset

Note: Any fall in price would not mean depreciation. But only that fall in price generated by normal wear and tear is considered as depreciation.

3.1 Depreciation

- Depreciation adjustments are required because virtually all non-current assets have finite useful economic lives.

- Depreciation is defined as the measure of the wearing out, consumption or other reduction in the useful economic life of a non-current asset, whether arising from:
  - the passage of time, or
  - obsolescence through technological or market changes

- Not attempt to reflect the value of non-current assets in the statement of financial position. Rather, the purpose is to charge the purchase price of the company's non-current assets in the statement of profit or loss in a systematic way

- Depreciation is an application of the matching concept

3.2 Depreciation – Accounting entry

1. Depreciation (Non-Cash Expense) – highlighted in your Statement of Profit and Loss

1. Reduces the value of the asset in your Balance Sheet by the amount of depreciation charged

3.3 Method of Depreciation

The definition of depreciation also makes it reasonably clear that the manner in which an asset's life diminishes varies according to the nature of the asset.

1. A financial asset, such as a lease on some property, has a life span which is fixed in terms of time.
2. Physical assets are likely to wear out through use and are likely to deteriorate more rapidly when they are used more heavily.
3. Some assets, such as computers, are more likely to be overtaken by new technology long before the end of their physical lives.

3.3.1 Straight line basis

This charges equal amounts every year as follows:

(Cost – Estimated residual value) / (Estimated useful life)

- The straight line basis can also be expressed by charging a percentage of cost.

3.3.1 Example

Company A purchases a machine for $100,000 with an estimated salvage value of $20,000 and a useful life of 5 years.

Cost of the asset: $100,000
Cost of the asset – Estimated salvage value: $100,000 – $20,000 = $80,000 total depreciable cost
Useful life of the asset: 5 years
Divide step (2) by step (3): $80,000 / 5 years = $16,000 annual depreciation amount

Year	Book Value (Beginning of Year)	Depreciation	Book Value (End of Year)
1	$ 100,000.00	$16,000	$ 84,000.00
2	$ 84,000.00	$16,000	$ 68,000.00
3	$ 68,000.00	$16,000	$ 52,000.00
4	$ 52,000.00	$16,000	$ 36,000.00
5	$ 36,000.00	$16,000	$ 20,000.00

3.3.2 Reducing balance method

This charges a fixed percentage of 'book value' (ie cost less depreciation to date) each year so that the whole cost is charged over the life of the asset

$$1-\sqrt[n]{\frac{Estimatedresidualvalue}{\cos t}}$$

3.3.2 Example

The fixed asset acquisition price is 11,000, the scrap value is 1,000, and the depreciation percentage factor is 30.
Using the Reducing balance method, 30 percent of the depreciation base (net book value minus scrap value) is calculated at the end of the previous depreciation period. Depreciation for the first three years is shown in the following table.

Period	Calculation of yearly depreciation amount	Net book value at the end of the year
Year 1	(11,000 - 1,000) * 30% = 3,000	(11,000 - 1,000) - 3,000 = 7,000
Year 2	(7,000 - 1,000) * 30% = 1,800	(7,000 -1,800) = 5,200
Year 3	(5,200 - 1,000) * 30% = 1,260	(5,200 - 1,260) = 3,940

3.4 Comparison

- One advantage of the reducing balance method is that it tends to charge a heavier proportion of the cost of the assets when they are new. This might make the depreciation charge in the statement of profit or loss more relevant because most of the charge will be based on the cost of newer, more recent assets.

- The straight line method weights assets equally, regardless of their age, which can be a drawback when the cost of assets is rising because of inflation.

4 Capital and Reserves

- The statement of financial position lists the assets owned by the company and the liabilities which are owed to third parties. The residual amount is called capital or equity and belongs to the shareholders

- Equity can arise in three main ways:
  - the sale of shares to the shareholders
  - certain adjustments, such as the revaluation of non-current assets
  - the retention of profit after tax.

5 Share Capital

The term “share capital” refers to the amount of money the owners of a company have invested in the business as represented by common and/or preferred shares.

- Shares carry a ‘nominal’ value for bookkeeping purposes. This does not, however, necessarily reflect the market value of the company and it is possible that the company will be able to find buyers who would be willing to pay rather more.

5.1 Share Premium

The difference between the nominal value of the shares and the amount paid for them is called the ‘share premium account’.

For example,
If the company sells its shares, having a face value of $3 per share at the price of $5 per share, then the share premium reserve is $2 per share. Still, if the investors sell the same further $8 per share, then the company’s securities premium of $3 is not gained. Simply it is the gain to the investor.

Accounting entry
The share premium account is just a part of the company’s share capital, but its value is included in ‘Other reserves’ in the statement of financial position

5.1 Share Premium

The share premium account can also be used for:

- the preliminary expenses of forming a company
- the expenses and commissions incurred in any issue of shares
- any profit or loss on the issue of loan stock
- any premium paid on the redemption of loan stock
- the expenses of issue of loan stock.

6 Amortisation

Amortization is an accounting technique used to periodically lower the book value of a loan or an intangible asset over a set period of time.

Amortisation is very similar to depreciation but it applies for intangible assets.

Example:

License from Pfizer to manufacture and sell its vaccine for **1 years**

License Fee of US$5 billion (Right to manufacture and sell vaccines)

Asset

Intangible Non-Current Assets

License Fee – US$ 5 billion (Expense in P&L)

(-) **Amortisation** US$500mm [(5bn – 0)/10]

7 Revaluation Reserve

Revaluation reserve is an accounting term used when a company creates a line item on its balance sheet for the purpose of maintaining a reserve account tied to certain assets.

- Despite the cost concept, it is common practice to revalue land and buildings in the statement of financial position
- The amount of the revaluation reserve is included in 'Other reserves' in the statement of financial position

7.1 Revaluation Reserve – Example

	Building Premise	Mkt Values
Cost (5 years back)	20 cr	20 cr
(-) Total Dep	(5 cr)	
As on Today - Book Value:	15 cr	22 cr
Revaluation Reserve (exception to the Prudence concept)	+ 7 cr	
	22 Cr	22 Cr

Treatment of Revaluation Reserve:
Increase the value of the Asset
Create a Revaluation Reserve in the Equity section of your liabilities side

8 Retained earnings

Retained earnings are the cumulative net earnings or profits of a company after accounting for dividend payments.

Normally the balance on the retained earnings reserve provides all of the company's distributable reserves. Company law restricts dividends by linking the maximum payout to distributable reserves to protect the interests of creditors. Otherwise the directors could use all of a failing company's remaining assets to pay a massive dividend to its shareholders. Doing so would act against the interests of the company's creditors and lenders.