

# Chapter 3: Profit & Loss Account

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Prof. Ram Kumar Kakani

Prof. N. Ramachandran

Tanmoy Chatterjee

## List of Transactions for Rewanchal Software Ltd. (RSL)

- ❑ On March 1, Rewanchal & others invest Rs. 50,000 in cash in RSL.
- ❑ On March 2, Rewanchal took a loan of Rs. 20,000 from Venu for RSL.
- ❑ On March 3, RSL purchased for cash two computers, each costing Rs. 29,000.
- ❑ On March 4, RSL purchased supplies for floppy disks and stationary for Rs. 6,000 on credit.
- ❑ On March 19, RSL completes its maiden sale of software to a retail store and receives a price of Rs. 12,000.
- ❑ On March 21, RSL pays Rs. 2,000 to its creditors for supplies.
- ❑ On March 29, RSL pays salaries to its employees, amounting to Rs. 4,000 and as office rent Rs. 1,200.
- ❑ On March 30, RSL completes a software package for a shoe shop. The customer agrees to pay the price of Rs. 8,000 a week later.
- ❑ On March 31, Rewanchal withdraws Rs. 3,500 for his personal use.

# Questions asked by owners/managers

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- Was it a good year or bad year?
- What was the volume of operations?
- What was the margin available on sales realization?
- The answer...

## Profit and Loss Account

# Profit and Loss Account

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- While a Balance Sheet
  - Reports value of assets, liabilities and owners equity at a particular point in time
  - And Reflects net change in owner(s) equity brought about by operations
- A Profit & Loss Account shows a company's earnings and expenses over a given period of time
- It exclusively summarizes revenue and expenses of the period and shows the net difference i.e., profit or loss of the period

# *Measurement of Income*

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- Comparing the revenue from sales against the cost of resources parted with for earning that revenue

# Balance Sheet Equation

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- ❑ Owners' equity = Assets – Liabilities ... (1)
- ❑ The amount of sales revenue realized increased owner(s) equity
- ❑ The amount of goods parted with decreased the owner(s) equity
- ❑ Thus, the resultant increase in owner(s) equity was equal to the net increase in assets. That is equal to the profit

# Profit and Loss Account

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- ❑ Owner(s) Equity = Contributed Capital + Retained Earnings
- ❑ Retained earnings = Revenue – Expenses ... (2)
- ❑ From (1) i.e., previous slide
- ❑ Assets = Liabilities + Contributed Capital + Revenue - Expenses ... (3)
- ❑ (2) is referred to as Profit & Loss Account

# Profit and Loss Account

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- ❑ It measures the income generated by the entity with the use of assets
- ❑ Revenue and expenses relate to a period and not to a point in time
- ❑ Recognition and measurement of revenue and expense are based on the ideas of realization, accrual, and matching



# Realization Principle

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- Process of converting non-cash resources and rights into money
- Recognition of revenue from sale of assets for cash (or specifically claims to cash)
- Revenue is recognized when goods are delivered (or services are rendered)
  - Possible Rationale ... Guess!!
  - Enables to have a reference in recognizing the expiration of costs incurred in making available such goods (or services)
- Exceptions:
  - Construction Contracts & Installment Sales contracts

# *Accrual Principle*

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- ❑ It is a generally accepted accounting principle (GAAP)
- ❑ Evaluates every transaction in terms of its impact on owner(s) equity
- ❑ Implies recognized revenue results in increase in owner(s) equity and expired costs or recognized expense results in decrease in owner(s) equity
- ❑ Net income arises from events that change owner(s) equity in a specified period which are not necessarily the same as change in the cash position

# Illustration ...

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- Ali Mehdi Khan starts his business on 1st July. He took a loan of Rs. 1,00,000/- from bank @ 12% per annum for purchasing plant & machinery, on the same day. The machine has a life of 10 years with no scrap value. He also paid Rs. 60,000/-, three months rent in advance
- Bank borrowing does not represent revenue – increase in cash is offset by an increase in liabilities
- Interest (Rs. 1000) depreciation (Rs. 833/-) are accrued expenses for July
- Rent expense for July will be Rs. 20000/-

# Illustration ...

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- Khan had written orders worth Rs. 2,00,000 in the month of June itself (even before starting his business). He started the production accordingly; the total production cost was Rs. 1,20,000; sales of merchandise to its customers till 31-07-2006 are as follows:
  - Total Sales = Rs. 95,000 (Cash Sales 25,000 and Credit Sales to Rajesh Rs. 70,000)
- Sales for June:
  - Nil – Because revenue is recognized only when goods are sold to the customers and not on receiving the order or on incurring the production cost

# Solution

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- Sales for July:
  - Rs 95,000
  - Accounting equation would be:
  - $\text{Cash} + \text{Debtors} = \text{Liabilities} + \text{Owner(s) Equity}$
  - $25,000 + 70,000 = 0 + 95,000$
- When Rajesh pays Rs. 70,000 in August
  - Sales does not occur
  - Cash would increase by Rs. 70,000 and the debtors would decrease. The amount of owner(s) equity remains same

# Accrual Vs Cash Basis

| <b>Basis of Accounting</b> | <b>Accrual Basis</b> | <b>Cash Basis</b>      |
|----------------------------|----------------------|------------------------|
| <b>Revenue</b>             | When earned          | When cash is collected |
| <b>Expense</b>             | When incurred        | When cash is paid      |
| <b>GAAP Compliance</b>     | Yes                  | No                     |

# Illustration

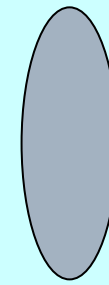
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- *We purchase merchandise worth Rs. 1,000 during the period; sell one half of this during the period for Rs. 750. Rental for the facilities during the period was Rs. 200*

# Discussion...

| Item  | Remarks  |
|---|--|
| <i>Cost of inventory</i> Rs 1000                                | The purchase prices of the merchandise.  |
| <i>Increase in owners equity i.e., Revenue</i> Rs 750           | The sale proceeds realized in exchange of one half of the merchandise.   |
| <i>Expenses i.e., expiration of inventorable cost</i> Rs 500    | The cost of the merchandise parted with in exchange for the revenue. The cost with respect to the revenue earned and hence expired cost. |
| <i>Expenses i.e. expiration of non-inventorable cost</i> Rs 200 | The cost of rent for the facility is a cost incurred during the period and expiring during the period i.e., a period cost.               |
| <i>Ending Inventory</i> Rs 500                                  | The unexpired cost. An asset merchandise inventory, as a convention valued at cost.  |





# Accounting Period

- A convenient segment of time, to collect, summarize and report all information on the material changes in owner(s) equity during the period
- Realization and Accrual principle will have to be applied in the context of the accounting period

| $t_0$           | Accounting period -1                                  | $t_1$           | Accounting period -2                                   | $t_2$           |
|-----------------|---|-----------------|--|-----------------|
| Balance Sheet 0 | Profit & Loss Account for the first accounting period | Balance Sheet 1 | Profit & Loss Account for the second accounting period | Balance Sheet 2 |

- Links in the information chain which makes up the life of the enterprise

# *Matching Revenues & Expenses*

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- ❑ The entire process of periodic earnings measurement
- ❑ Means deducting from revenues of a period the cost of goods sold or other expenses that can be identified with such revenues, or of that period, on the basis of a cause and effect relationship
- ❑ The expenses to be matched against the revenue of the period will be all those costs expiring during the accounting period

# Revenue

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- Broadly, it is the total amount realized from the sale of goods (or provision of services) together with earnings from interest, dividend, rents and other items of income
- '*Operating income*' Vs '*non-operating income*'
- Implication of Realization Principle
  - If the right to receive that income is created or the time for which the income relates have expired it is accrued income

# *Characteristics of Revenue*

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- ❑ Normally, generated out of business activities
- ❑ Results in inflow of assets (cash or receivable) and outflow of goods or services
- ❑ Usually related to a specific period i.e., revenue of one year cannot be included in revenue of the other year
- ❑ Leads to increases in owner(s) equity
- ❑ Different from 'profit' or 'net income'

# *Expense*

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- ❑ The expiration of the assets and the resultant decrease in assets leading to the decrease in owner(s) equity
- ❑ Costs incurred and expired in connection with the earning of revenue
- ❑ Sacrifice made or resource consumed in relation to the revenues earned during an accounting period
- ❑ Costs that have expired during an accounting period are treated as expense
- ❑ The expired cost, directly or indirectly related to a given fiscal period

# *Characteristics of Expense*

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- ❑ Expenses are incurred for the purpose of generating revenue or benefit
- ❑ Benefit is usually derived during the same accounting period under consideration
- ❑ It is related to a particular period. However, the payment of expenses can be made before the recognition of expense or afterwards
- ❑ Leads to decreases in owner's equity

# More on expenses...

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Expenses of a given period are

- ❑ Costs and expenses of current accounting period
- ❑ Costs incurred in a previous accounting period that become expenses or expired costs during this year (such as prepaid rent and prepaid insurance)
- ❑ Expenses of this year, the monetary outlay for which will be made during a subsequent period (such as salaries payable and taxes payable)

# Expense recognition

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Under following circumstances:

- ❑ In the period in which there is direct identification or association with the revenue of the period
- ❑ An indirect association with the revenue of the period
- ❑ Measurable expiration of assets (unexpired costs) though not associated with the production of revenue for the current period
- ❑ Assets that become expenses: inventories, prepaid expenses, and long-lived assets



## *Profit & Loss Account Preparation*

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- It is a summary of all 'accounts' dealing with transactions relating to revenue and expenses
- Done by summarizing all individual accounts accumulating information on different items relating to the elements of '*expense*' and '*revenue*'

Assets = Liabilities + Contributed Capital + Revenue – Expenses – Dividends

$$A = L + C + R - (E + D)$$

- 'Revenue - (Expenses + Dividends or Drawings)' is equal to the 'Retained Earnings'

# Illustration

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- *During an accounting period Ramsons buys twelve units of inventory for Rs. 1,200. Another ten units are purchased on credit for Rs. 1,000. Fifteen units of inventory were sold during the period on credit for Rs. 2,250. Five units of inventory were sold for cash for Rs. 750 during the same period.*

# Horizontal and Vertical format of P&L Account

|   |              |
|---|--------------|
| <b>Revenue of the period:</b>                         | Rs.          |
| 15 units sold on credit                               | 2,250        |
| 5 units sold for cash                                 | 750          |
| <b>Total revenue of the period</b>                    | <b>3,000</b> |
| Less: Cost of goods sold or expired cost of inventory | 2,000        |
| <b>Profit of the period</b>                           | <b>1,000</b> |

| <b>RAMSONS</b>  |           |                 |           |
|---|-----------|-----------------|-----------|
| <b>Profit &amp; Loss Account (for an accounting period)</b> |           |                 |           |
| <b>Expenses</b>   | <b>Rs</b> | <b>Revenues</b> | <b>Rs</b> |
| Cost of goods sold  | 2,000     | Sales           | 3,000     |
| Profit for the period                                       | 1,000     |                 |           |
|   | 3,000     |                 | 3,000     |

## *Possible Future Expenses*

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- Sometimes costs are incurred directly in relation to the revenue of a given accounting period, in subsequent periods
- Amount of expense in question is estimated, relating to an accounting period in order to make a reasonably accurate measurement of the profit or loss of the period
- Example: Provision for bonus
- Bad debt expense
  - Arises out of credit sales
  - Credit Sales → Receivables → Bad Debts

# *Possible Future Expenses*

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- A business is started with owner(s) equity of Rs. 2,500. The business makes four credit sales of Rs. 250 each during a period. Cost of sales for the same is known to be Rs 500.*
- Suppose one of the credit sales account becomes doubtful*

# Financial Statements

| <b>Profit &amp; Loss Account</b><br>for an accounting period |           |                 |           |
|--|-----------|-----------------|-----------|
| <b>Expenses</b>  | <b>Rs</b> | <b>Revenues</b> | <b>Rs</b> |
| Cost of goods sold   | 500       | Sales           | 1,000     |
| Profit for the period  | 500       |                 |           |
|  | 1,000     |                 | 1,000     |

| <b>Balance Sheet</b><br>as at the close of an accounting period |              |                                  |              |
|---|--------------|----------------------------------|--------------|
| <b>Assets</b>   | <b>Rs</b>    | <b>Liabilities &amp; Capital</b> | <b>Rs</b>    |
| Accounts receivable   | 1,000        | Retained earnings                | 500          |
| Other assets  | 2,000        | Owner(s) equities                | 2,500        |
| <b>Total</b>  | <b>3,000</b> | <b>Total</b>                     | <b>3,000</b> |

# After accounting for Bad Debts

| <b>Profit &amp; Loss Account</b> for an accounting period |           |                 |           |
|---|-----------|-----------------|-----------|
| <b>Expenses</b>   | <b>Rs</b> | <b>Revenues</b> | <b>Rs</b> |
| Cost of goods sold  | 500       | Sales           | 1,000     |
| Bad Debt expense  | 250       |                 |           |
| Profit for the period                                     | 250       |                 |           |
|   | 1,000     |                 | 1,000     |

Bottomline hit by Rs. 250

| <b>Balance Sheet</b> as at the close of an accounting period |           |                                  |           |
|--|-----------|----------------------------------|-----------|
| <b>Assets</b>  | <b>Rs</b> | <b>Liabilities &amp; Capital</b> | <b>Rs</b> |
| Accounts receivable  | 1,000     | Retained earnings                | 250       |
| Estimated Collection loss                                    | 250       |                                  |           |
| Other assets   | 2,000     | Other equities                   | 2,500     |
|  | 2,750     |                                  | 2,750     |

# *Fixed Assets and Depreciation*

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- The cost of a fixed asset, written off or matched as expense against the revenues of different periods during which the asset is used
- It is the expired cost of an asset during an accounting period
- *Illustration – A crushing machine purchased for Rs 50,000 having a five-year life and no salvage value is used in a business. During the life of the asset, it will be able to earn revenue of Rs 100,000*



# Computations...

## Revenue over the period of use of the assets

|               |           |           |           |           |           |              |
|---------------|-----------|-----------|-----------|-----------|-----------|--------------|
| Total Revenue |           |           |           |           |           | = Rs 100,000 |
| Period →      | 1         | 2         | 3         | 4         | 5         |              |
| Amount        | Rs 20,000 | Rs 20,000 | Rs 20,000 | Rs 20,000 | Rs 20,000 | = Rs 100,000 |

\* Assu

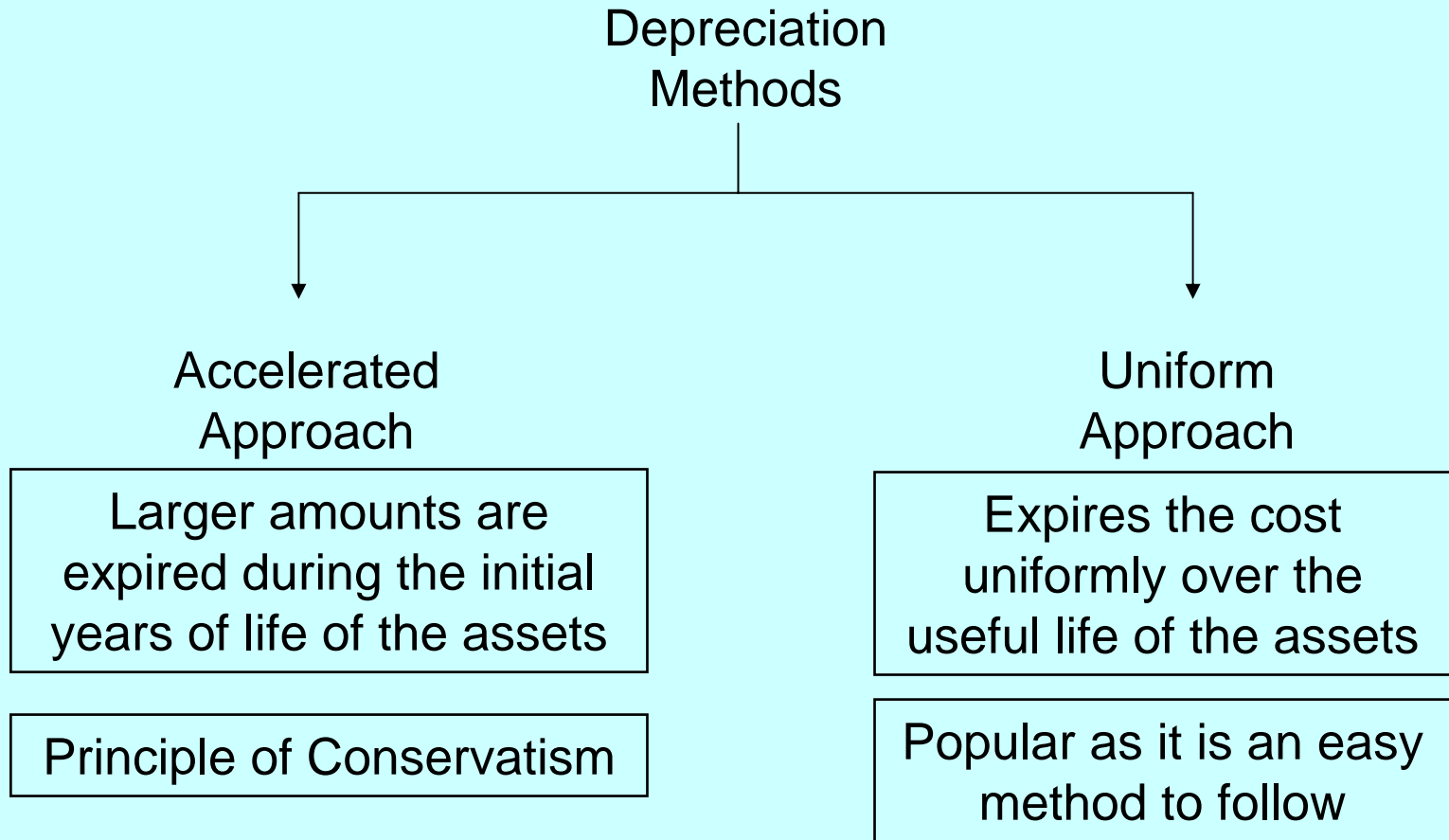
**Hence, profit per annum is Rs 10,000 or Rs 50,000 over the useful life of the asset**

ets

|                                    |           |           |           |           |           |            |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| Total Machine Cost                 |           |           |           |           |           | =Rs 50,000 |
| Period →                           | 1         | 2         | 3         | 4         | 5         |            |
| Amount                             | Rs 10,000 | Rs 10,000 | Rs 10,000 | Rs 10,000 | Rs 10,000 | =Rs 50,000 |
| Unexpired at the end of the period | Rs 40,000 | Rs 30,000 | Rs 20,000 | Rs 10,000 | Rs 0      |            |

\* Assuming that asset is used evenly over the useful life

# Methods of Depreciation



# Depreciation: Some concepts

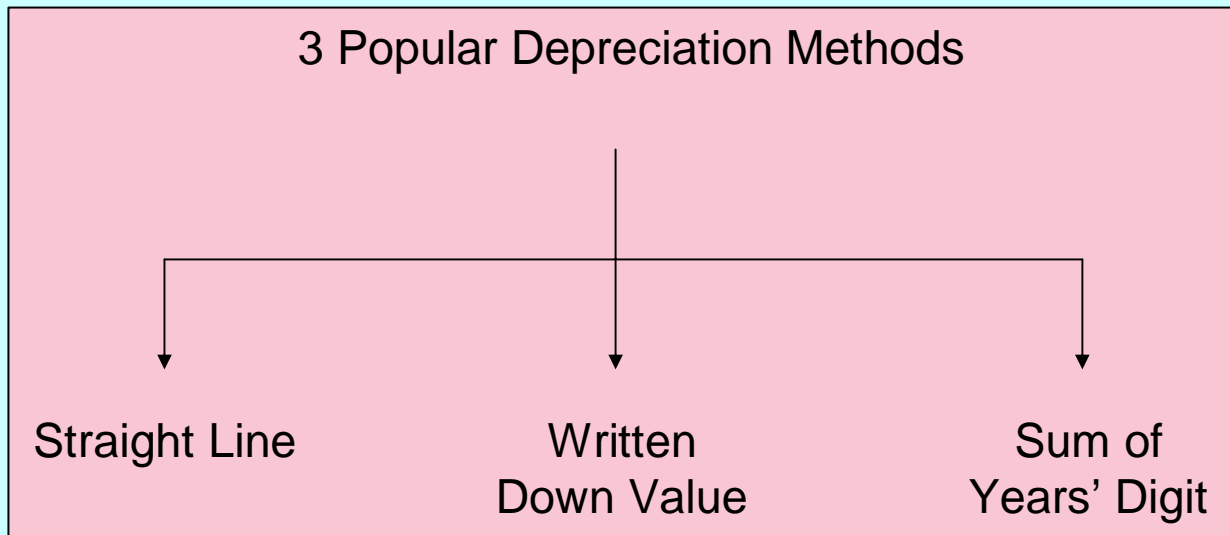
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- *Original cost*
  - Cost incurred in making the asset available for use at the first instance. This amount is specific and known on the acquisition of the asset
- *Salvage value*
  - Recovery (or sales value) of the asset at the end of its useful life. Value needs to be estimated (mostly).
- *Useful life*
  - Expected time period for which the asset is to provide economic service or productive life. Estimated based on experience/technical factors

# Depreciation: Some concepts

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- *Depreciable cost*
  - Original Cost of asset – Salvage Value
- *Book value*
  - Original Cost – Accumulated Depreciation



# Straight Line Method

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- Depreciable cost of the asset is proportionately allocated as expense against the revenues during each year of useful life of the asset

- Illustration
- A company acquires a machine at the beginning of operations at Rs 10,000. It is expected that machine will last 10 years and will have no salvage value at the end of its useful life

# Depreciation @ 10% per annum: Straight-line Method

| Year | Cost  | Annual Depreciation | Accumulated Depreciation | Remaining Book Value |
|------|-------|---------------------|--------------------------|----------------------|
| 0    | 10000 | -                   | -                        | -                    |
| 1    | 10000 | 1000                | 1000                     | 9000                 |
| 2    | 10000 | 1000                | 2000                     | 8000                 |
| 3    | 10000 | 1000                | 3000                     | 7000                 |
| 4    | 10000 | 1000                | 4000                     | 6000                 |
| 5    | 10000 | 1000                | 5000                     | 5000                 |
| 6    | 10000 | 1000                | 6000                     | 4000                 |
| 7    | 10000 | 1000                | 7000                     | 3000                 |
| 8    | 10000 | 1000                | 8000                     | 2000                 |
| 9    | 10000 | 1000                | 9000                     | 1000                 |
| 10   | 10000 | 1000                | 10000                    | 0                    |

# Written Down Value Method

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- ❑ Depreciation is taken as a certain rate applied to the written down value of the asset as at the beginning of each year
- ❑ The amount of expiration of the cost of the asset is higher during the initial years

# Written Down Value Method: @20% per annum

| Year | Original Cost | Annual Depreciation | Accumulated Depreciation | Remaining Book Value |
|------|---------------|---------------------|--------------------------|----------------------|
| 0    | 10000         | -                   | -                        | 10000                |
| 1    | 10000         | 2000                | 2000                     | 8000                 |
| 2    | 10000         | 1600                | 3600                     | 6400                 |
| 3    | 10000         | 1280                | 4880                     | 5120                 |
| 4    | 10000         | 1024                | 5904                     | 4096                 |
| 5    | 10000         | 819                 | 6723                     | 3277                 |
| 6    | 10000         | 655                 | 7378                     | 2621                 |
| 7    | 10000         | 524                 | 7902                     | 2097                 |
| 8    | 10000         | 419                 | 8322                     | 1678                 |
| 9    | 10000         | 336                 | 8658                     | 1342                 |
| 10   | 10000         | 268                 | 8926                     | 1074                 |

Since there is no salvage value for the asset at the end of its useful life, the terminal year depreciation will be taken as Rs. 1,342 i.e., Rs. 268 (the depreciation for the period) plus Rs 1074 (the terminal value of the asset).



# Sum of the Years' Digit Method

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- This method applies a declining fraction year to the depreciable cost of the asset
- The declining fraction is constructed by taking the number of years of useful service left at the beginning of the year as numerator and sum of the digits of the number of years of useful life as denominator
- Produces results akin to the written down value method with the difference that there will be no residual left
- If the asset has 10 years useful life the denominator of the fraction will be equal to  $(10+9+8+7+6+5+4+3+2+1)$  i.e., 55
- So, the first year's depreciation charge will be  $10/55$ , second years depreciation will be  $9/55$  and so on

# Sum of the Years' Digit Method

| Year | Original Cost | Annual Depreciation | Accumulated Depreciation | Remaining Book Value |
|------|---------------|---------------------|--------------------------|----------------------|
| 0    | 10000         | -                   | -                        | -                    |
| 1    | 10000         | 1818                | 1818                     | 8182                 |
| 2    | 10000         | 1636                | 3455                     | 6545                 |
| 3    | 10000         | 1455                | 4909                     | 5091                 |
| 4    | 10000         | 1273                | 6182                     | 3818                 |
| 5    | 10000         | 1091                | 7273                     | 2727                 |
| 6    | 10000         | 909                 | 8182                     | 1818                 |
| 7    | 10000         | 727                 | 8909                     | 1091                 |
| 8    | 10000         | 545                 | 9455                     | 545                  |
| 9    | 10000         | 364                 | 9818                     | 182                  |
| 10   | 10000         | 182                 | 10000                    | 0                    |

# Intangible Assets & Amortization

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- ❑ Intangible assets such as patent rights or distribution rights represent unexpired cost
- ❑ The expiration of intangibles, though akin to depreciation, is distinguished by referring to it as amortization
- ❑ Usual practice is to amortize on straight line basis over a reasonably short period

# Depreciation & Profit Measurement

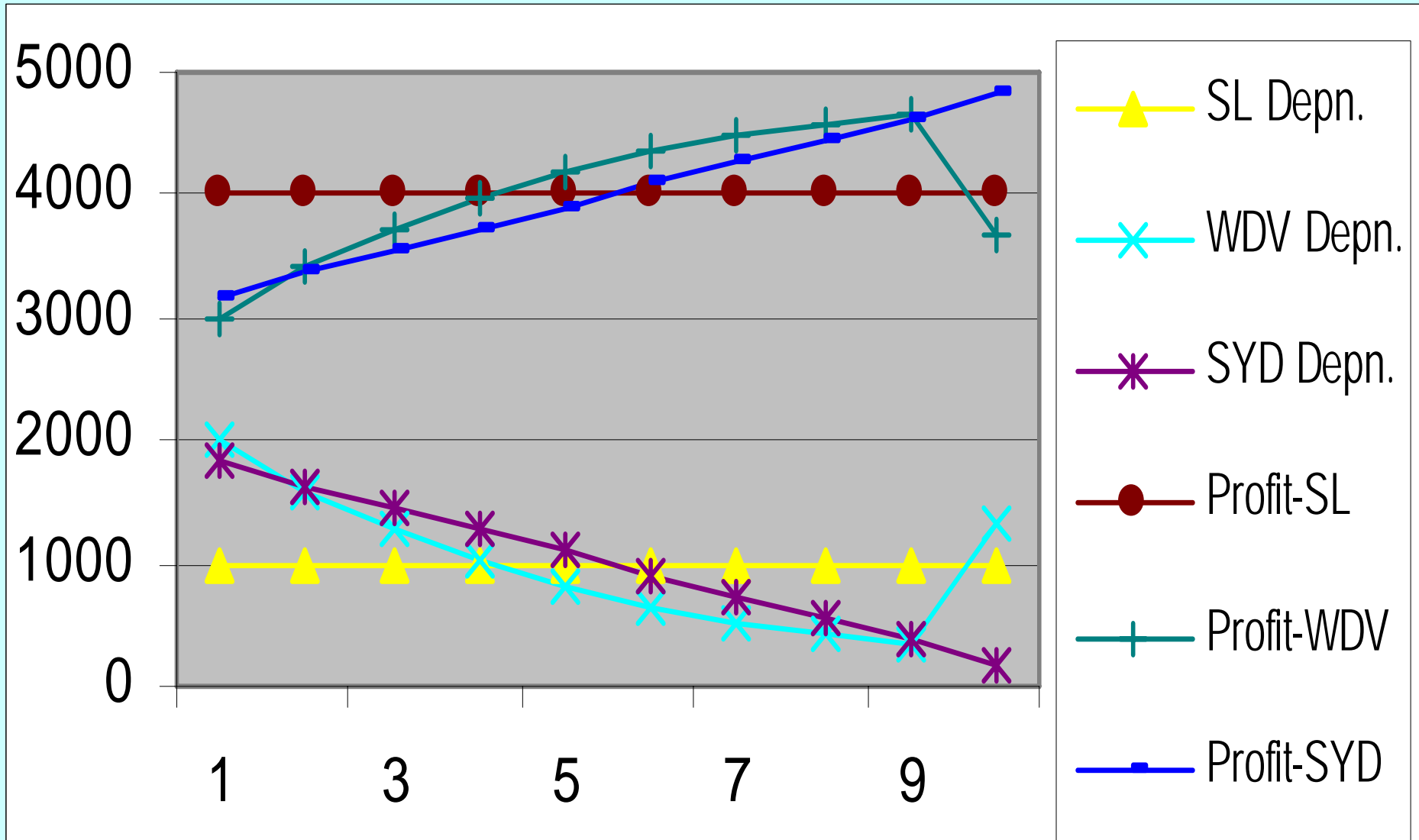
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- ❑ Depending on the method used for charging depreciation, we have a different amount of charge for annual depreciation
- ❑ Difference is only in terms of annual apportionment
- ❑ The net effect of the methods is therefore in terms of showing less or more profit in any particular year

# Profit Measurement under Different Depreciation Methods – Illustration

| Year | Earnings Before Depreciation<br>(say Rs.5000/- per annum) | Straight line depreciation | Written down value depreciation | Sum of the years' digit depreciation | Profit under Straight line | Profit under written down value | Profit under sum of the years' digit |
|------|---|----------------------------|---------------------------------|--------------------------------------|----------------------------|---------------------------------|--------------------------------------|
| 1    | 5,000   | 1,000                      | 2000                            | 1818                                 | 4000                       | 3000                            | 3182                                 |
| 2    | 5,000   | 1,000                      | 1600                            | 1636                                 | 4000                       | 3400                            | 3364                                 |
| 3    | 5,000   | 1,000                      | 1280                            | 1455                                 | 4000                       | 3720                            | 3545                                 |
| 4    | 5,000   | 1,000                      | 1024                            | 1273                                 | 4000                       | 3976                            | 3727                                 |
| 5    | 5,000   | 1,000                      | 819                             | 1091                                 | 4000                       | 4181                            | 3909                                 |
| 6    | 5,000   | 1,000                      | 655                             | 909                                  | 4000                       | 4345                            | 4091                                 |
| 7    | 5,000   | 1,000                      | 524                             | 727                                  | 4000                       | 4476                            | 4273                                 |
| 8    | 5,000   | 1,000                      | 419                             | 545                                  | 4000                       | 4581                            | 4455                                 |
| 9    | 5,000   | 1,000                      | 336                             | 364                                  | 4000                       | 4664                            | 4636                                 |
| 10   | 5,000   | 1,000                      | 269+1,074*                      | 182                                  | 4000                       | 3657                            | 4818                                 |
|      | <b>50,000</b>   | <b>10,000</b>              | <b>10,000</b>                   | <b>10,000</b>                        | <b>40,000</b>              | <b>40,000</b>                   | <b>40,000</b>                        |

# Profit Measurement under Different Depreciation Methods



# Profit & Loss A/c – Horizontal Format

| <b>Tools India Ltd.</b>   |          |            |
|---|----------|------------|
| <b>Profit &amp; Loss Account</b> For the year ended December 31, 2006 |          |            |
|   | Schedule | Amount     |
| <u>Sales net</u>  | 1        | 255        |
| Other income  | 2        | 5          |
| <b>Total Revenue</b>  |          | <b>260</b> |
| Cost of goods sold  | 3        | 130        |
| <b>Gross profit</b>   |          | <b>130</b> |
| Operating expenses:   |          |            |
| Personnel   | 4        | 49         |
| Depreciation  | 5        | 11         |
| Other expenses  | 6        | 28         |
| <b>Operating profit</b>   |          | <b>42</b>  |
| Interest  | 7        | 12         |
| <b>Profit before taxes</b>  |          | <b>30</b>  |
| Income tax provision  |          | 12         |
| <b>Net profit after tax</b>   |          | <b>18</b>  |

# Profit & Loss A/c – Vertical Format

| <b>Tools India Ltd.</b>   |          |            |                     |          |            |
|---|----------|------------|---------------------|----------|------------|
| <b>Profit &amp; Loss Account</b> for the year ended December 31, 2006 |          |            |                     |          |            |
| <b>Debit</b>  |          |            | <b>Credit</b>       |          |            |
|   | Schedule | Amount     |                     | Schedule | Amount     |
| <u>Cost of goods sold</u>   | 3        | 130        | <u>Sales net</u>    | <u>1</u> | 255        |
| Gross profit  |          | 130        | <u>Other income</u> | 2        | 5          |
|   |          | <b>260</b> |                     |          | <b>260</b> |
| <u>Personnel expenses</u>   | 4        | 49         | Gross profit        |          | 130        |
| <u>Depreciation</u>   | 5        | 11         |                     |          |            |
| <u>Other expenses</u>   | 6        | 28         |                     |          |            |
| Operating profit  |          | 42         |                     |          |            |
|   |          | <b>130</b> |                     |          | <b>130</b> |
| <u>Interest</u>   | 7        | 12         | Operating income    |          | 42         |
| Profit before taxes   |          | 30         |                     |          |            |
|   |          | <b>42</b>  |                     |          | <b>42</b>  |
| Income tax provision  |          | 12         | Profit before taxes |          | 30         |
| Net profit after tax  |          | 18         |                     |          |            |
|   |          | 30         |                     |          | 30         |



# Schedule 1: Sales

| <b>Schedule 1: Sales (Rs Millions)</b> |      |               |
|--|------|---------------|
| Gross sales                            |      | 260.00        |
| Less: Sales returns and allowances     | 1.75 |               |
| Sales discount                         | 3.25 | 5.00          |
| <b>Net sales</b>                       |      | <b>255.00</b> |
| Net sales –Domestic                    |      |               |
| Machine Tools group                    | 83   |               |
| Watch group                            | 87   |               |
| Tractor group                          | 60   |               |
| Lamp group                             | 13   |               |
| Dairy Machinery group                  | 2    |               |
| <b>Total domestic sales</b>            |      | <b>245.00</b> |
| Export:                                |      |               |
| Machine Tools Group                    | 6    |               |
| Watch Group                            | 2    |               |
| Others                                 | 2    |               |
| <b>Total Export Sales</b>              |      | <b>10.00</b>  |

# Profit & Loss A/c Items

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## □ Trade discounts

- Given when sales are done in bulk (i.e., *discount* is based on volume of business)
- Never brought into accounts – the sales and hence sales invoice are valued at net of trade discount

## □ Other Income

- Operating income – Derived from the main-line operations of the business
- Other income – Arises from activities incidental to the business

# Profit & Loss A/c Items

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## □ Sales Returns and Allowance

- Not according to specifications, damaged, or defective

## □ Sales/Cash Discount

- Sales discounts are reduction from invoice price granted for prompt payment of the invoice within specified time limit
- 'Net amount' or 'No cash discount' (N)
- 'A 3 percent discount if payment is made in 10 days otherwise net amount to be paid in 60 days' (3/10, n/60)

# Profit & Loss A/c Items

| <b>Schedule 2: Other Income</b> |             |
|---------------------------------|-------------|
|                                 | Rs Million  |
| Interest – banks                | 0.50        |
| Interest – staff and offices    | 1.20        |
| Export incentives               | 1.80        |
| Sales agency commission         | 0.50        |
| Profit on sales of assets       | 0.30        |
| Dividend on trade investments   | 0.20        |
| Other miscellaneous income      | 0.50        |
| <b>Total</b>                    | <b>5.00</b> |



# Profit & Loss A/c Items

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## □ Cost of Goods Sold

- Complex in cases of multi-product, multi-division companies, having large volumes of semi-finished goods
- Two challenges:
  - First is with respect to changes in the price per unit of purchase. At what price should we identify the cost of goods sold?
  - Second, how do we evaluate cost of semi-finished goods?

# Cost of Goods Sold Details

| <b>Schedule 3: Cost of goods sold</b>                        |               |
|--|---------------|
|  | Rs Million    |
| Inventory on January 1, 2000                                 | 81.00         |
| Add: Purchase  | 110.00        |
| Freight-in   | 10.00         |
| Other direct material costs                                  | 15.00         |
| <b>Total goods available</b>                                 | <b>216.00</b> |
| Less: Raw material & semi finished inventory on Dec 31, 2000 | 71.00         |
| <b>Goods available for sale</b>                              | <b>145.00</b> |
| Less: Finished goods inventory on December 31, 2000          | 15.00         |
| <b>Cost of goods sold</b>                                    | <b>130.00</b> |

# Profit & Loss A/c Items

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## □ **Gross Profit**

- Reflects the direct input costs
- To a great extent variable with the volume of operations

## □ **Operating Expenses**

- All those costs of making the inventory available for sale
- Are directly or indirectly traceable to the inventory to be sold
- Usually segregated under two groups – selling expenses & administrative expenses

# Profit & Loss A/c Items

## □ Personnel Expenses

- Includes remuneration and other benefits to staff and workmen

| <b>Schedule 4: Personnel expenses</b>           |                    |
|---|--------------------|
|   | <i>Rs Millions</i> |
| Salaries, wages and bonus                       | 37.81              |
| House rent allowance                            | 2.19               |
| Gratuity  | 0.75               |
| Contribution to provident fund                  | 2.75               |
| Contribution to Employees State Insurance (ESI) | 0.50               |
| Workmen and Staff Welfare expense               | 5.00               |
| <b>Total</b>                                    | <b>49.00</b>       |



# Profit & Loss A/c Items

## □ Depreciation expense

- Expiration of costs of fixed assets
- Usual practice to classify the depreciation expense for different groups of assets

| <b>Schedule 5: Depreciation</b> |                    |
|---------------------------------|--------------------|
|                                 | <i>Rs Millions</i> |
| Fixed assets                    | 9.84               |
| Tools and Instruments           | 0.02               |
| Patterns, Jigs and Fixtures     | 1.14               |
| <b>Total</b>                    | <b>11.00</b>       |

# Profit & Loss A/c Items

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## □ Other Expenses

- Expenses other than those disclosed separately are usually grouped together
- Relatively very small when considered as individual items

## Schedule 6: Other Expenses

*Rs Millions*

|  |       |
|--|-------|
| Power and Fuel                           | 3.10  |
| Rent                                     | 0.50  |
| Rates and Taxes                          | 0.40  |
| Insurance                                | 0.50  |
| Water and Electricity                    | 0.60  |
| Repairs to buildings                     | 0.20  |
| Repairs to machinery                     | 0.80  |
| Printing and Stationery                  | 0.90  |
| Advertisement and Publicity              | 2.40  |
| Audit fees                               | 0.05  |
| Royalties                                | 0.85  |
| Sole selling and other agents commission | 4.70  |
| Directors fees                           | 2.00  |
| Provision for bad debts and advances     | 0.20  |
| Loss on assets sold or discarded         | 1.30  |
| Provision for warranty repairs           | 1.00  |
| Miscellaneous expenses                   | 8.50  |
| Total                                    | 28.00 |

# Profit & Loss A/c Items

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## □ Operating Profit

- Measure of 'operational efficiency'
- Obtained by deducting personnel, depreciation and other expenses from gross profit
- Usually referred to as OPBIT or EBIT

## □ Interest Expense

- Arises out of management's decision to finance part of the assets from borrowings
- The level of interest expense presents the amount of risk the company is carrying in terms of fixed commitments

# Profit & Loss A/c Items

| <b>Schedule 7: Interest</b>                  |              |
|--|--------------|
|  | Rs. Million  |
| Debentures                                   | 0.58         |
| Fixed deposits                               | 1.50         |
| Loans from Government                        | 5.00         |
| Term loans from Banks/Financial Institutions | 0.42         |
| Cash (packaging) credit from banks           | 3.50         |
| Others                                       | 1.00         |
| <b>Total</b>                                 | <b>12.00</b> |

# Profit & Loss A/c Items

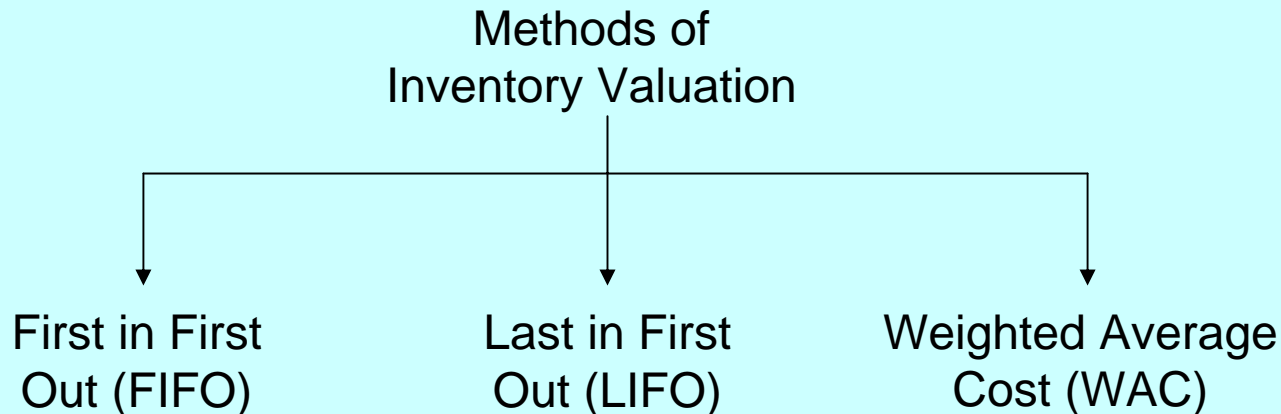
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- Net Profit before Tax
  - The surplus after meeting all expenses including interest
  - The profit available as a result of both operating and financing performance
- Income Taxes
  - Determined by profit before tax
  - Tax payable is determined by tax laws
- Net profit or Profit after Tax
  - It is the net amount of surplus earned by the company
  - The amount ultimately available for appropriation
  - Can be either distributed as dividends or retained

# Methods of Inventory Valuation

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- “Only thing certain with prices normally is that it is not certain”
- The recording of inventory as well as its expiration as cost of goods sold made on the basis of historical cost



# Inventory Valuation: FIFO, LIFO, and WAC

| <b>Milk &amp; Milk Limited Example</b> |             |                      |                     |       |             |
|--|-------------|----------------------|---------------------|-------|-------------|
| <b>Balance Sheet on January 1</b>      |             |                      |                     |       |             |
| <b>Assets</b>                          |             |                      | <b>Equities</b>     |       |             |
| Cash                                   | INR         | 26.00                | Owners Equity       | INR   | 26.00       |
| Total Assets                           |             | 26.00                | Total Equity        |       | 26.00       |
| <b>Transactions during January</b>     |             |                      |                     |       |             |
| <b>Date</b>                            |             | <b>Item</b>          |                     |       |             |
| 13-Jan                                 | Bought      | one kg sugar @ Rs 12 |                     |       |             |
| 22-Jan                                 | Bought      | one kg sugar @ Rs 14 |                     |       |             |
| 31-Jan                                 | Sold        | one kg sugar @ Rs 15 |                     |       |             |
| <b>Statement of Income for January</b> |             |                      |                     |       |             |
|  | <b>FIFO</b> |                      | <b>Average Cost</b> |       | <b>LIFO</b> |
| Sales                                  | INR         | 15.00                | INR                 | 15.00 | INR 15.00   |
| Less: Cost of Sales                    |             | 12.00                |                     | 13.00 | 14.00       |
| Trading Income                         |             | 3.00                 |                     | 2.00  | 1.00        |



# Take Home ...

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- ❑ Purchase Cost is the same irrespective of the method of inventory valuation
- ❑ Cost of goods sold and ending inventory at the end of the period are different for the three different methods of inventory valuation
- ❑ Try preparing its balance sheet at the end of the period?
- ❑ What do you observe?
- ❑ In all the cases inventory *plus* cost of goods sold amount to the same, since it is based on actual historical cost only

**ACC****P&L a/c for the year ended 31.12.06**

| <b>Income</b>                          | <b>in Rs Crores</b> |
|--|---------------------|
| 1. Sale of Products & Services (gross) | 6504.46             |
| less excise duty recovered             | 653.22              |
| less Sales Discounts, Sales Return     | 120.41              |
| Net Sales                              | 5730.83             |
| 2. Other Income (Non - operating)      | 123.1               |
| Gross Revenue                          | 5853.93             |
| <b>Expenditure</b>                     |                     |
| 3. Manufacturing Expenses              | 2642.84             |
| <b>Gross Profit</b>                    | 3211.09             |
| 4. Personnel Expenses                  | 322.54              |
| 5. Depreciation                        | 260.95              |
| 6. Other Expenses                      | 939.77              |
| <b>Operating Income</b>                | 1687.83             |
| 7. Interest                            | 54.37               |
| <b>Profit Before Tax</b>               | 1633.46             |
| 8. Corporate Tax                       | 393.86              |
| <b>Profit After Tax</b>                | 1239.6              |

# Explanations to Items

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- ❑ **Gross Sales (or Gross Turnover):** The aggregate amount for which product sales are effected (or services rendered) by an enterprise (inclusive of taxes paid)
- ❑ **Net Sales (or Net Turnover):** The sales after deduction of sales returns & allowances, sales discounts, etc.
- ❑ **Operating Income:** The net income arising from the normal operations and activities of an enterprise without taking into account extraneous transactions and expenses of a purely financial nature

# Explanations to Items

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- ❑ **Gross Profit (or Gross Margin or Gross Loss):** The excess of the proceeds of goods sold and services, rendered during a period over their cost, before taking into account administration, selling, distribution and financing expenses
- ❑ **Net Income (or Net Profit or Net Loss):** The excess of revenue during a particular accounting period

# Dividends & Retained Earnings

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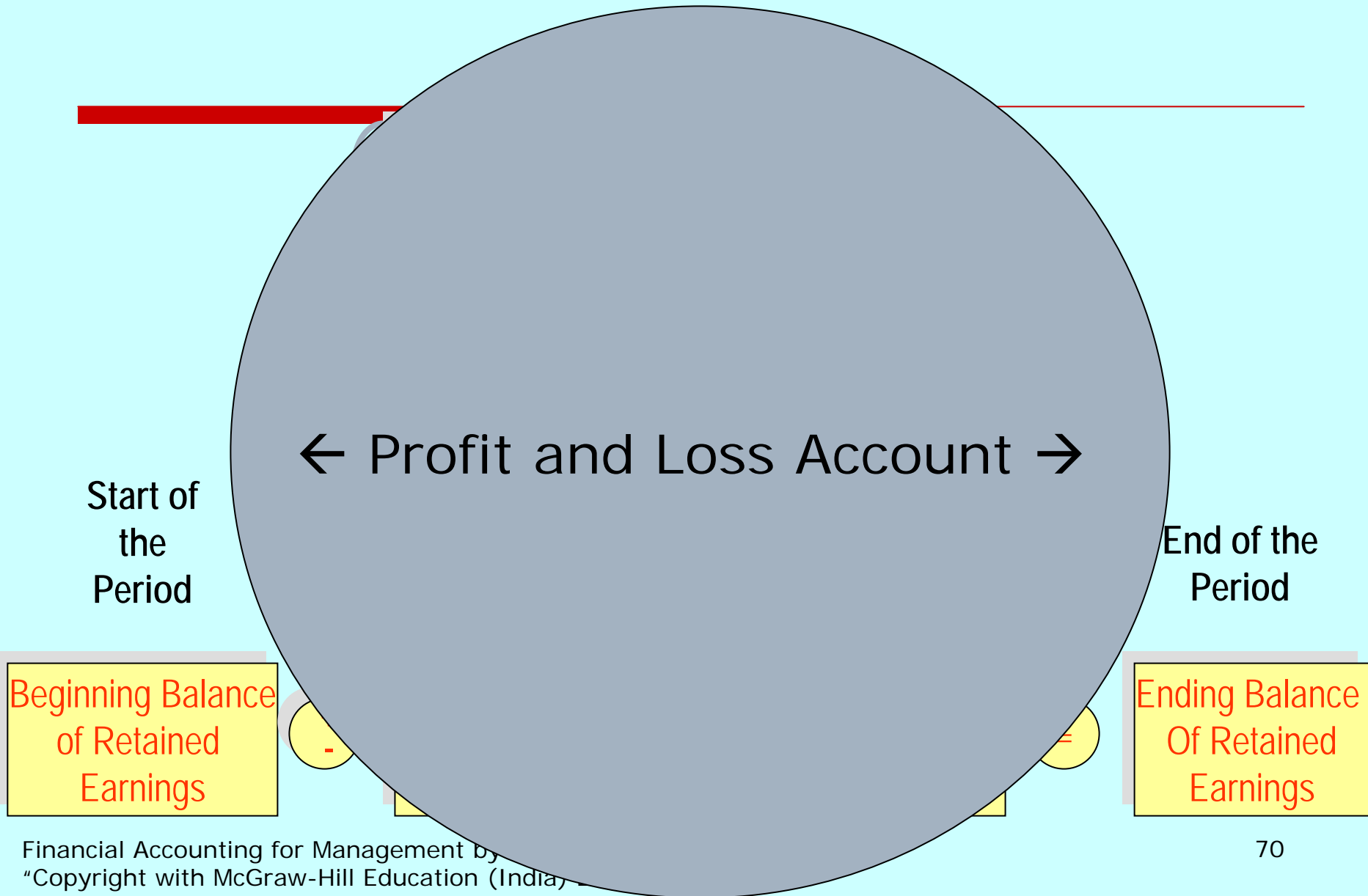
## □ Dividends

- An appropriation of profits among owners → not an expense
- Technically the withdrawals by owners of the business
- In Joint Stock Companies, it is subject to Company Law

## □ Retained Earnings

- After subtracting dividends declared from the net profit, any surplus remaining is added to (accumulated) retained earnings. Also referred to as *reserves and surplus*
- Sometimes designated to signify retention of earnings for different future purposes such as redemption of debt (redemption reserve), replacement of assets etc.

# Components Of Retained Earnings



# Further Discussion (Optional)

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# Profit & Loss Account of a Manufacturing Concern

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- Profit & Loss account during a period can be divided into 4 parts:
  - Trading Account: Indicates the amount of gross profit earned by matching the cost of sales with the revenues generated
  - Manufacturing Account: Gives the cost of goods manufactured by the manufacturer
  - Profit & Loss Account: Used to measure the profit/loss of the firm by way of deducting the administrative expenses, selling & distribution expenses, non-trading losses, and finance charges from gross profit and the non-trading income
  - Profit & Loss Appropriation Account: Reflects how the net profit earned by the firm is utilized → it is an income distribution statement



# Thank You

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