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# UNIT 5 CONSTRUCTION AND ANALYSIS OF PROFIT AND LOSS ACCOUNT

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## Objectives

The purpose of this unit is to introduce to you the profit and loss account. After you have studied this unit, you should be able to:

- appreciate the importance of income measurement
- classify income and expense accounts
- prepare a profit and loss accounts
- appreciate the linkage between accounting records and profit and loss account
- appreciate the linkage between profit and loss account and balance sheet.

## Structure

- 5.1 Introduction
- 5.2 Profit and Loss Account and Balance Sheet: The Linkage
- 5.3 Measurement of Income
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- 5.5 Some Indirect Expenses
- 5.6 Methods of Depreciation
- 5.7 Form of Profit and Loss Account
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- 5.14 Key Words
- 5.15 Self-assessment Questions/Exercises
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## 5.1 INTRODUCTION

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The balance sheet, as we have studied in the previous unit, is intended for reporting the value of assets, liabilities and owners' equity at a particular point in time. It does not disclose anything about the details of operation of the business. All it tells about are the details of operation of the business. It tells about the net change in owner's equity brought about by operations during the period between the previous balance sheet and present one. Was it a good year or a bad year? What was the volume of operations? What was the margin available on sales? How was sales rupee distributed among different expenses and profit? All these questions cannot be answered without the help of an additional financial statement addressed exclusively to summarise revenues and expenses of the particular period. This statement is what is referred to variously as Profit and Loss Account, Income Statement or Income summary. This statement is so named since it summarises all the revenues or incomes and all the expenses for earning that revenue showing the net difference, that is profit or loss for the period.

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## 5.2 PROFIT AND LOSS ACCOUNT AND BALANCE SHEET: THE LINKAGE

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When you sell an item costing Rs. 70 for Rs. 100, assuming no other costs, you earn a profit of Rs. 30. What we have done is nothing but measurement of the net income. This is achieved by comparing the revenue from sales against the cost of materials parted with for earning that revenue. Net difference of this comparison, in simple terms, represents the net income or profit.

The importance of **profit** and its measurement in accounting leads in turn to the significance of profit and loss account. However, it will be interesting to see how this document is related to the balance sheet. In the previous unit we have seen that the earning of revenue increases owners' equity. Please recall the balance sheet equation we had seen in the previous unit. It stated:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity} \dots \dots \dots (1)$$

We also saw that owners equity at any point in time is represented by the following relationship:

$$\text{Owner's Equity} = \text{Assets} - \text{Liabilities} \dots \dots \dots (2)$$

This implies that except in the case of first balance sheet, owners' equity need not be equal to contributed capital. We also saw that the owners' equity changed with the sale transactions. How did this happen? It happened as follows:

- 1 The amount of sales revenue realised increased the owner's equity.
- 2 The amount of goods 'parted with decreased the owner's equity.

Thus, resultant increase in owners' equity was equal to the net increase in assets. That is, equal to the profit.

We explained owners' equity in the previous unit as:

$$\text{Contributed Capital} + \text{Retained Earnings'}$$

Assuming no withdrawals, 'retained earnings' is nothing but all the revenue minus expenses. Thus, we could write our relationship as follows:

$$\text{Retained earnings} = \text{Revenue} - \text{Expenses} \quad (3)$$

Now, substituting right hand side of equality (1) in our earlier balance sheet equation we have:

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Revenue} - \text{Expenses} \dots \dots \dots (4)$$

It is the last two terms in equality (4) above which is referred to as profit and loss account or income summary. Thus, we find that profit and loss account is an integral part of any balance sheet in that it is an expansion of one of the terms of the balance sheet. In order to appreciate and understand profit and loss account, we should clearly understand the conceptual basis of the same.

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## 5.3 MEASUREMENT OF INCOME

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Profit and loss account measures the income generated by the entity. The income is generated from or with the use of its assets. Thus, the concern of the profit and loss account is the income arising out of the assets, rather than the assets themselves. In order to make this segregation and make the process of measurement practical, we



should have precise idea of what constitutes revenue and expenses. Recognition and measurement of revenue and expense are based on the ideas of **realisation, accrual, accounting period, and matching.**

### **Realisation**

Realisation is technically understood as the process of converting non-cash resources and rights into money. It is understood to mean sale of assets for cash or claims to cash. As an accounting principle, it is used to identify precisely the amount of **revenue** to be recognised and the amount of **expense** to be **matched** to such revenue for the purpose of **income** measurement.

Realisation, thus, usually pertains to the recognition of revenue from sale or provision of goods or services to customers. **When should we recognised revenue?** This is the question that realisation principle tries to answer. There can be several arguments for and against recognising revenue at the time when the inventory is acquired, when the goods are made ready for sale, when the order is received, when the goods are delivered, or when the sale proceeds are collected. In order to avoid such confusion in accounting, revenue is generally recognised when goods are delivered or services are rendered. This is done despite the fact that delivery is only one of a series of events related to sale. The rationale is that delivery validates a claim against the customer.

**Realisation** being the point of recognition of revenue, it also enables us in recognising the **expiration of** costs incurred in making available such goods or services. Thus, the realisation principle facilitates the process of income measurement by identifying revenues and the expiration of costs with respect to such revenues. By implication, if costs are incurred in producing the goods, such costs are not considered as expenses unless sales are made.

There are two major **exceptions** to the notion that an exchange is needed to justify the realisation of revenue. First, in case of **long run construction contracts** revenue is often recognised on the basis of a proportionate or partial completion method. Thus in this case revenue is recognised without satisfying the test of completion and delivery. Second, in case of **long run instalment sales contracts**, depending on the uncertainties involved, revenue is regarded as realised only in proportion to the actual cash collections. In this case even though delivery is complete at the time of contract, recognition of revenue is deferred and related to actual cash collections.

### **Accrual**

It is generally accepted in accounting that the basis of reporting income is **accrual**. Resources and obligations change in time periods other than those in which money is received or paid. Economic activity of an enterprise in a short period is complete if the cycle of productive resources to money is completed. In reality, continuous production, use of credit, and long lived assets produce several overlapping cycles. This makes the process of evaluation of income very complex.

Accrual principle tries to evaluate every transaction in terms of its impact on the owners' equity. In simple terms it implies that recognised revenues result in increases in the owners' equity while expired costs or recognised expenses result in decrease in the owners' equity. The essence of the accrual concept is that **net income arises from events that change the owners' equity in a specified period and that these are not necessarily the same as change in the cash position** of the business. Thus, realisation and accrual together lay down the ground rules for measurement of income.



## Activity 5.1

Fill in the blanks

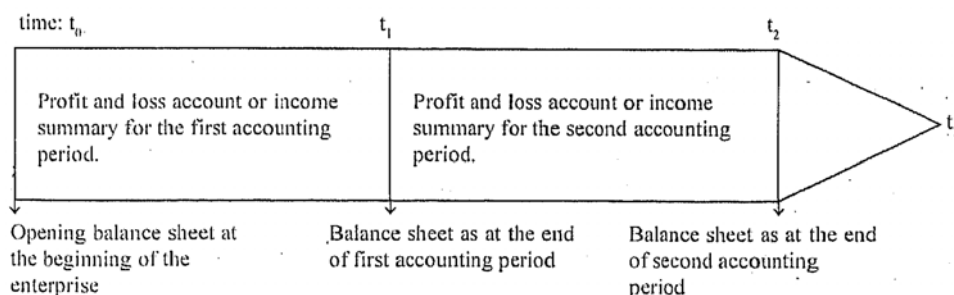
1. Profit and loss account is summary of.....and.....for an accounting period.
2. Realisation in accounting is the basis of .....recognition.
3. Income measurement is achieved by matching.....
4. Costs with respect to realised revenues are considered as .....
5. Recognised revenue.....to owners' equity
6. Expenses result in.....of owners' equity
7. Expenses could be recognised in relation to.....realised or an.....period.

## Accounting Period

Once we accept the concept of 'going concern', it is inconceivable to approach the problem of profit measurement without a clear understanding of the idea of accounting period. The most accurate way to measure the results of an entity's operations will be to measure them at the time of liquidation.

Considering the whole life of the business, net income is nothing but the excess of amount the owners get over what they have put into it (investment). But it is inconceivable and impractical to imagine that one has to wait till the winding up of the business for ascertaining the profit. Accountants choose some convenient segment of time, such as a calendar year, to collect, summarise and report all information on material changes in the owners' equity during that period. There is no sanctity about an accounting period being a year. It has evolved as a convention out of convenience over the years. There is some historical evidence to suggest that accounting periods used to be a couple of years or the entire life time of a venture and so on, in the past. Even now, there are firms which follow the system of certain number of weeks as an accounting period. However, generally, as a convention, most enterprises try to have a uniform length of accounting period for period to period comparison of results.

The crux of the matter is that the realisation and accrual principle, as we have seen earlier, will have to be applied in the context of the accounting period. It is the revenue which is **realised** during that accounting period which is treated as accruing to the owners' equity. Thus, accounting period enables us to have a practical system of valuation and measurement. Accounting periods are bounded by balance sheets at the beginning and at the end of the period. Operations during the period are summarised by income statements. This process can be illustrated in the following form:



Here accounting periods could be seen as links in the chain which makes up the life of the enterprise. Accounting period is variously referred to as **fiscal year** and **financial year** also.



## Matching

In reality we match revenues and expenses during the accounting periods. Matching is the entire process of periodic earnings measurement, often described as a process of matching expenses with revenues. In a narrow sense this means deducting from the revenues of a period the cost of goods sold or other expenses that can be identified with such revenues of that period on the basis of cause and effect.

## Revenue

In a broad sense revenue is the total amount realised from the sale of goods or provision of services together with earnings from interest, dividend, rents and other items of income. Revenue is recognised when the enterprise has a right to income. In practice we make a segregation of an enterprise's income as obtained from its main operations and from activities incidental to the main operations. The former is referred to as **operating income** and the latter as other income or **non-operating income**. Realised revenue as we have seen earlier need not be realised in cash. If the right to receive that income is created or the time to which the income relates has expired, we treat the income as accrued. For example, a credit sale to be collected during the next accounting period is an income of this period. Similarly, interest to be received on a specified date is treated as accrued and hence earned for the period covered by the current accounting period.

## Measurement of Expenses

Expenses are costs incurred in connection with the earnings of revenue. As such **the point of reference for recognition of expense becomes the recognition of revenue**. Costs incurred do not become expenses until the goods or services in question are exchanged. Expense is sacrifice made, resource consumed in relation to the revenues earned during an accounting period. Thus cost is not synonymous with expense. Only costs that have expired during an accounting period are treated as expenses. Consider the following example:

Rakesh purchases merchandise worth Rs. 1,000 during the period and sells one half of this during the same period for Rs. 750.

Here, we have:

Cost	: Rs. 1,000	The purchase price of the merchandise.
Revenue	: Rs. 750	The sale proceeds realised in exchange of one half of the merchandise.
Expense	: Rs. 500	The cost of the merchandise parted with or given over to the customer in exchange of the revenue i.e. cost with respect to the revenue earned and hence expired cost.
Inventory	: Rs. 500	The unexpired cost. An asset i.e. merchandise inventory (as a convention, valued at cost).

Generally, unexpired costs represent assets. All assets which have limited life expire as expenses with respect to revenue earned during their useful life.

Expense means a decrease in owners' equity that arises from the operation of a business during specified accounting period. Thus, cost means any sacrifice, whether or not the sacrifice affects the owners' equity during a given accounting period. American Accounting Association provides the following description for expense:

of cost expiration is based on a complete or partial decline in the usefulness of assets, or on the appearance of a liability without a corresponding increase in assets.



Expenses of a given period are:

- i) Expenses of this year. These are costs incurred during the accounting period which become expired costs during the same period. Example: cost of material bought and sold during the same accounting period.
- ii) Costs incurred in a previous accounting period that become expenses or expired costs during this year. Example: inventory purchased during the previous period but sold during this period. The amount of inventory which represented unexpired costs and hence an asset at the close of the previous accounting period becomes expired cost and hence expense during the period in which it is sold.
- iii) Expenses of this year, the monetary outlay for which will be made during a subsequent period. These are also expired costs of the current period, but the costs are incurred by contracting a liability.

Expenses are recognised under the following circumstances:

- a) Expenses are given recognition in the period in which there is a direct identification or association with the revenue of the period. This implies that recognition of expense is directly related to the realisation of revenue.
- b) An indirect association with the revenue of the period. Example: rent, salaries, insurance, depreciation and such other costs which are not usually inventoried.
- c) Measurable expiration of assets though not associated with the production of revenue for the current period. Example: loss from flood, fire and similar events.

### **Assets that become expenses**

Examination of some specific cases of assets that become expenses will enable us to understand the concept very clearly.

**Inventories:** Inventory of merchandise become expense when it is sold. In case of manufacturing organisations all the costs incurred on transformation of raw materials add value to the inventory. These costs are treated as expenses only when the inventory in question is sold.

**Prepaid Expenses:** Prepaid expenses represent services or assets paid for, prior to their actual use. Thus, they represent unexpired costs. They become expenses when the services are used or assets are consumed.

**Long-lived Assets:** Fixed assets have a limited useful life. The costs of such assets expire during the life of the assets in question. Such expiration of costs of the assets are referred to as depreciation.

What we have examined so far are some of the conceptual bases necessary for the understanding and preparation of a profit and loss account. In the subsequent part of this unit we shall examine the mechanics of how to prepare a profit and loss account.

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## **5.4 PREPARATION OF PROFIT AND LOSS ACCOUNT**

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Profit and Loss Account, as we have seen, is a summary of all 'accounts' dealing with transactions relating to revenue and expenses. An account is a statement wherein information is accumulated relating to an item or a group of similar items. This accumulation is done in such a manner that it is fairly easy to summarise by combining several such items. In case of profit and loss account, the process of preparation is nothing but a summarisation of all individual accounts, accumulating information on different items of **expense** and **revenue**.



We have seen the expanded balance sheet equation at the beginning of this unit using abbreviations) as follows:

$$A = L + C + R - E \quad \dots(4)$$

where:

A = assets

L = liabilities

C = contributed capital

R = revenues

E = expenses

For the sake of simplicity we ignore withdrawals. However, if we consider withdrawals, it will imply assets being less to that extent and equality being provided with one more negative term of withdrawals or drawings. Thus, the equality will be:

$$A = L + C + R - (E + D) \quad \dots(5)$$

Where D = dividends or drawings

By transposing this equality it is possible for us to write it without negative symbols. Thus we have:

$$A + E + D = L + C + R \quad \dots(6)$$

This equality is the basic accounting equality. The quantities on the left hand side (LHS) are normally referred to as '**debit**' or 'Dr.' in short and quantities on the right hand side (RHS) as '**credit**' or 'Cr.' in short. We have also seen that because of the basic balance sheet equality, this accounting equality will always hold true.

The terms on the RHS and LHS are represented by one or more separate accounts where information is accumulated using the same framework. LHS terms, namely, A, E and D have debit balances. In other words, normally these accounts have debit side entries more than or equal in value to entries on the credit side. Hence, for those accounts: Debits - Credits > 0. When it is equal to zero there is no balance in the account. Similarly, the accounts relating to the terms on the RHS of the equality, that is L, C, and R, normally have credit balances. Hence, these accounts imply: Credits - Debits >= 0.

The process of accumulating information is also simple. In the accounts representing LHS terms, all increases of those items are debited in the respective accounts and decreases are credited, net difference showing actual position at any point in time. Similarly, in case of accounts representing RHS, increases with respect to an item are credited in a particular account, and decreases are debited to that account. Net difference shows balance of that item as of a point in time. From this, it is also clear that the terms 'debit' and 'credit' in accounting have no more practical significance than 'left' and 'right' of an account.

An account thus could be represented as a capital letter T denoting the nature of information accumulated in that. Thus, we have 'cash account' or 'receivable account' or 'payables account' or 'inventory account' and so on.

**Example:**

**Cash Account**

<b>Dr.</b>	<b>Cr.</b>
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In this case LHS will represent all cash receipts or increase and RHS will represent all cash payment or decreases.



Let us illustrate the ideas we have discussed with the help of a simple example:

- January 1 - Started business with Rs.1,000.
- January 1 - Bought merchandise worth Rs.800 and stored it.
- January 8 - Received order for half the merchandise from A.
- January 10 - Delivered the merchandise, customer invoiced Rs.500.
- January 15 - Received order for the other half of merchandise
- January 17 - Delivered merchandise and cash received Rs.500
- January 31 - Customer (A) pays.

**Accounts of the above transactions**

Rs. Debit	Cash A/c		Rs. Credit
Capital	1,000	Merchandise inventory	800
Sales	500	Balance	1,200
Receivable (A)	500		<u>2,000</u>
	<u>2,000</u>		
Balance	1,200		

Rs. Debit	Capital A/c		Rs. Credit
Balance	1,000	Cash	1,000
	<u>1,000</u>		<u>1,000</u>
		Balance	1,000

Rs. Debit	Mercantile Inventory A/c		Rs. Credit
Cash	800	Cost of goods sold	400
		Cost of goods sold	<u>400</u>
	<u>800</u>		<u>800</u>

Rs. Debit	Sales A/c		Rs. Credit
Profit & Loss A/c.	1,000	Receivables (A)	500
		Cash	<u>500</u>
	<u>1,000</u>		<u>1,000</u>

Rs. Debit	Receivables (A) A/c		Rs. Credit
Sales	500	Cash	500
	<u>500</u>		<u>500</u>





Rs. Debit	Cost of Goods Sold A/c	Rs. Credit
Merchandise inventory	400	Profit & Loss A/c. 800
Merchandise inventory	<u>400</u>	
	<u>800</u>	<u>800</u>

Rs. Debit	Profit & Loss A/c	Rs. Credit
Cost of goods sold	800	Sales 1,000
Retained earnings	<u>200</u>	
	<u>1,000</u>	<u>1,000</u>

Rs. Debit	Retained Earnings	Rs. Credit
Balance	200	Profit & Loss A/c 200
		<u>200</u>
	<u>200</u>	
	Balance	200

Rs. Debit	Balance A/c	Rs. Credit
Cash	1,200	Capital 1,000
		Retained Earnings 200
	<u>1,200</u>	<u>1,200</u>

In the above example what we have attempted is to complete the accounting process based on a very simple situation. The process of recording and summarising, we resorted to could be explained as follows:

Starts business with Rs.1,000. This transaction affects two accounts: Cash increase - entry on the debit side of the account. Capital increase - entry on the credit side of the account.

Purchases merchandise and stores them. Merchandise inventory increase - entry on the debit side of the account. Cash account decrease- entry on the credit side of the account.

Receipt of order for half the merchandise. Receipt of order does not warrant any record. We consider realisation of revenue only when goods are delivered.

- a) Delivered goods and customer invoiced. Since cash is not collected simultaneously, it represents a credit transaction. It results in an increase in claims against 'A'. Accounts receivable is debited. Revenue is earned, sales account is credited.
- b) We should also consider the cost of sales. We part with merchandise inventory worth Rs. 400. It is an expired cost, hence a reduction in owner's equity, is an expense. Debit cost of sales account with increase in expense or expiration of cost. We credit the merchandise inventory account to show the reduction in inventory.



Cash received from sales. Debit cash and credit increase in revenue, sales.

We also recognise expense by debiting cost of sales account and crediting merchandise inventory account.

Receivables collected. Cash increase is recorded by debit in cash account and a credit to receivables (A) account. The credit to receivables account shows the liquidation of our claim (asset). In practice this amounts to repayment of the debt by A.

## 5.5 SOME INDIRECT EXPENSES

In the example discussed above, we dealt only with direct revenue and direct expense. Revenue arose from two sale transactions-one on credit and the other on cash. The expense was one simple direct item of expense-the cost of sale or the recognition of expiration of inventory cost. Before we proceed to examine the detailed profit and

loss account, we should discuss some of the important indirect expenses.

### Bad Debt Expense

In most business situations sale 'on credit' is common. We also treat such sale as 'realised' since they produce a certain asset 'receivable'. Thus, credit sale is recognised at the point of sale during the accounting period in which the transaction takes place. Uncollected balance at the close of the accounting period is reflected as an asset on the balance sheet.

Now, if the customer could not make payment or will not make payment, both these records (record as revenue of the period and record as asset at the close of the period) will amount to overstatement in the records. However, we have no basis for estimating the exact amount of such collection losses. This is so since the 'uncollectability is known only in a subsequent accounting period. It is this situation which warrants us to estimate the amount of expense with respect to collection losses. Let us consider the following example.

Suppose, a business makes four credit sales of Rs.250 each during a period. Cost of sales for the same being Rs.500.

<b>Profit and Loss Account</b>			
	<b>Rs.</b>		<b>Rs.</b>
Cost of sales	500	Sales	1,000
Profit	500		
	<u>1,000</u>		<u>1,000</u>

The balance sheet records arising from this transaction will be:

### Balance Sheet

<b>Assets</b>	<b>Rs.</b>	<b>Liabilities &amp; Capital</b>	<b>Rs.</b>
Accounts receivable	1,000	Retained earnings	500

Now assuming that one of the accounts is going bad, the collection loss will amount to Rs.250. If we do not take this into account, the implications are: we have overstated receivables (asset in the balance sheet), sales (revenue in the profit and loss account) and profit (retained earnings in the balance sheet). It is possible for us to estimate these losses on account of **bad debts** and reduce the revenues and thereby profits to that extent. It is achieved by recognising this amount as our increase in expense-bad debts expense-thereby reducing profit.



Thus, we will prepare profit and loss account and balance sheet as follows:

**Profit and Loss Account**

Debit	Rs.		Rs. Credit
Cost of Sales	500	Sales	1,000
Bad debt expense	250		
Profit	250		
	1000		1,000

**Balance Sheet**

Assets	Rs.	Liabilities & Capital	Rs.
Accounts receivable	1,000	Retained earnings	250
Less: Estimated collection loss	250	750	

Usually the possible collection losses are estimated and provided for by charging them as expenses of the period. Such estimate is reduced from the value of the asset receivables to show the realisable value of the asset.

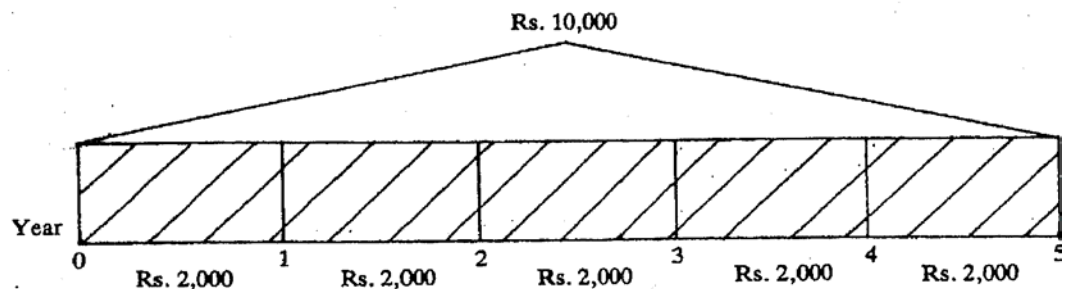
**Depreciation on Fixed Assets**

In our study earlier we have seen that fixed assets have long life and provide benefits beyond one operating cycle. While discussing the idea of expense we saw that expenses are expired costs. All costs incurred on any asset with limited life, thus, expire during its life time. Now it is not difficult to perceive what depreciation is. Consider the following illustration.

A machine purchased for Rs.5,000 having five year life and no salvage value is used in a business. During the life of the asset, it will be able to earn a revenue of Rs.10,000.

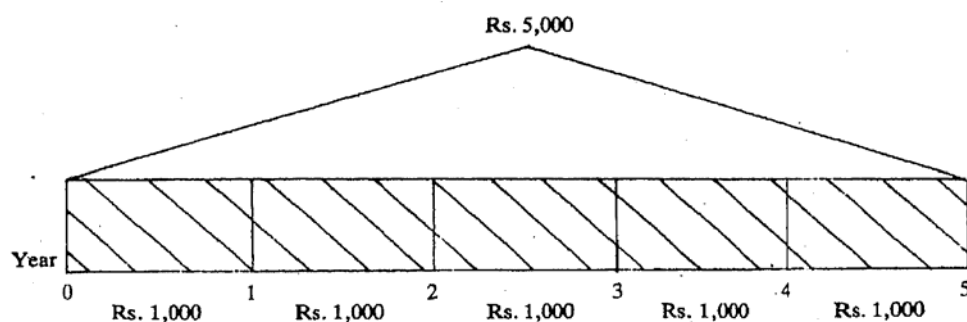
It is simple arithmetic to say that by using the machine we make a profit of Rs.5,000 over its life time (Rs.10,000 revenues less Rs.5,000 cost of the machine) assuming no other costs. The problem of depreciation arises when we have to measure the profits annually. What should be the amount of profit to be recognised every year?

We can approach this problem diagrammatically. Assume that the following scale shows the amount of revenue earned. We take it that the revenue is earned in equal amounts





during the five years of the life of the asset. Assuming no other costs and no salvage value, the cost of the asset becomes expense over a five year period. Now the question is how should we apportion this cost over the life of the asset? If we make the simple assumption that the cost expires in equal proportion, we have the simplest solution. This we could represent as follows:



Now, having made the assumption of spreading the cost equally, we have come to the conclusion that one-fifth of the cost of the asset expires annually. That portion of the cost of the asset which is reckoned to expire during an accounting period is what is termed as **depreciation expense**. This also clarifies that, normally, the total amount of depreciation of an asset shall not be more than the depreciable cost of the asset. It is this 'expense' which is matched against the revenues of a period for determining profit.

From the above example we can easily determine that the profit per annum is

Rs. 1,000, that is, Rs.5,000 over the useful life of the asset. Thus, to recapitulate, **depreciation expense is the cost of a fixed asset written off against the revenues of different periods during which the asset is used.**

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## 5.6 METHODS OF DEPRECIATION

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There are several methods of depreciation which differ from one another only from the standpoint of how the cost is treated as expiring over the life of the asset. We shall briefly discuss only two of the most commonly used methods. However, in order to understand the methods we should be clear about the following ideas:

**Original cost of the asset:** This is the cost incurred in making the asset available for use in the first instance.

**Salvage value:** The expected recovery or sales value of the asset at the end of useful life.

**Useful life:** The expected time period for which the asset is to provide economic service i.e. the period for which the asset could be used for production.

**Depreciable cost:** This is original cost less salvage value. This is the amount of expense the enterprise will be incurring on account of expired costs of the machine over its useful or economic life.

**Written down value:** Written down value of an asset at any point of time is original cost less depreciation to date (accumulated depreciation). This is also referred to as book value.

### Straight Line Method

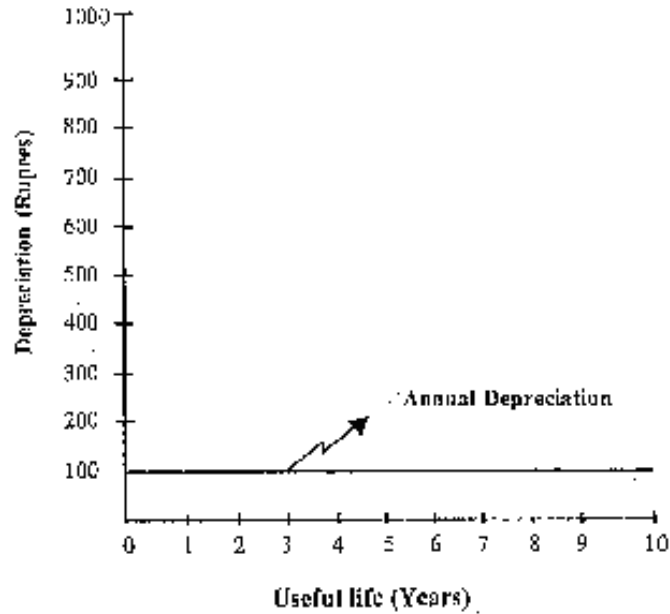
Under the straight line method the depreciable cost of the asset is proportionately allocated as expense against the revenues during each year of the useful life of the asset.



Assume that a company acquires a machine at the beginning of operations at Rs. 1,000. It is expected that the machine will last 10 years and will have no salvage value at that time.

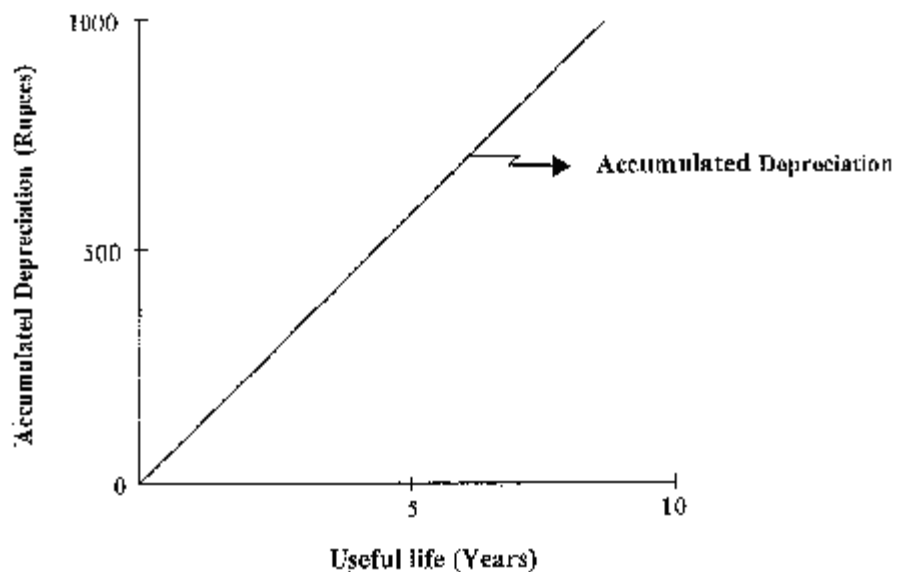
The depreciation for the machine every year under straight line method will be Rs. 100, or  $\text{Rs. } 1,000 \div 10$ . The written down value at the end of first year will be  $1,000 - 100 = 900$ , at the end of second year  $1,000 - (100 + 100)$  or  $(900 - 100) = 800$  and so on, becoming zero at the end of 10 years. Graphically, it could be shown as follows:

**Figure 5.1 : Straight-line Method — Annual Depreciation Charge**

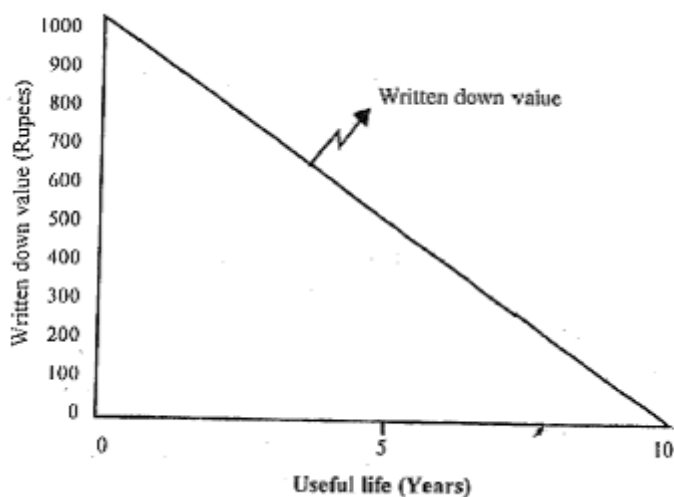


If we draw a graph showing the annual depreciation it will be a straight line parallel to the base line. Hence the name **straight line** method (Figure 5.1). The accumulated depreciation will be increasing annually at a uniform rate becoming equal to the depreciable cost of the asset at the end of useful life (Figure 5.2 ). As shown in Figure 5.2 it is a straight line sloping upward to the right from origin whereas written down value steadily declines to become zero at the end of useful life of the asset. Hence a downward sloping straight line reaching origin at the end of useful life (Figure 5.3).

**Figure 5.2 : Straight-line Method—Accumulated Depreciation**



**Figure 5.3 : Straight-line Method – Written down value**



### Written Down Value method

Under this method depreciation at a certain rate is applied to the written down value of the asset as at the beginning of each year. The effect of this method is that the amount of depreciation charge every year is an Amount less than the previous year. In other words, larger amounts are charged to depreciation during the initial years.

For example:

A company buys an asset at a cost of Rs. 1,000. It decides to depreciate it at the rate of 20 per cent per annum based on written down value method.

The annual book value, depreciation charge and accumulated depreciation will be as follows (Table 5.1):

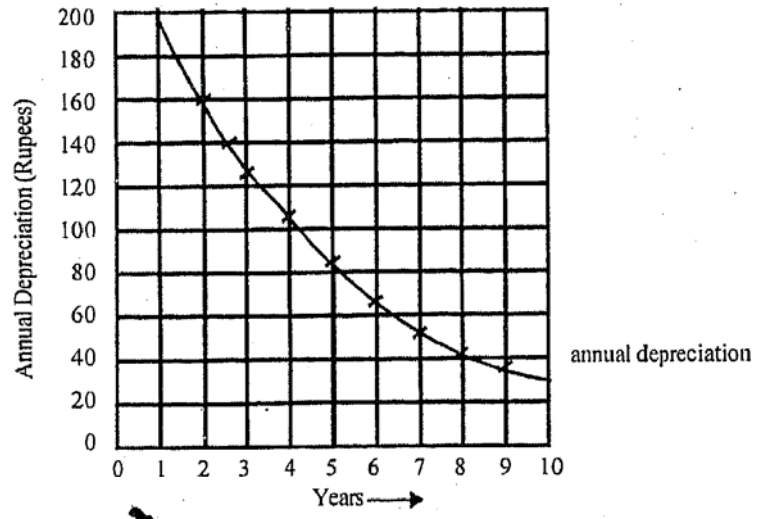
**Table 5.1: Written Down Value Depreciation**

Year	Written down value at the end of the year	Annual depreciation	Accumulated depreciation
0	1,000	-	-
1	800	200	200
2	640	160	360
3	512	128	488
4	410	102	590
5	328	82	672
6	262	66	738
7	210	52	790
8	168	42	832
9	134	34	866
10	107	27	893

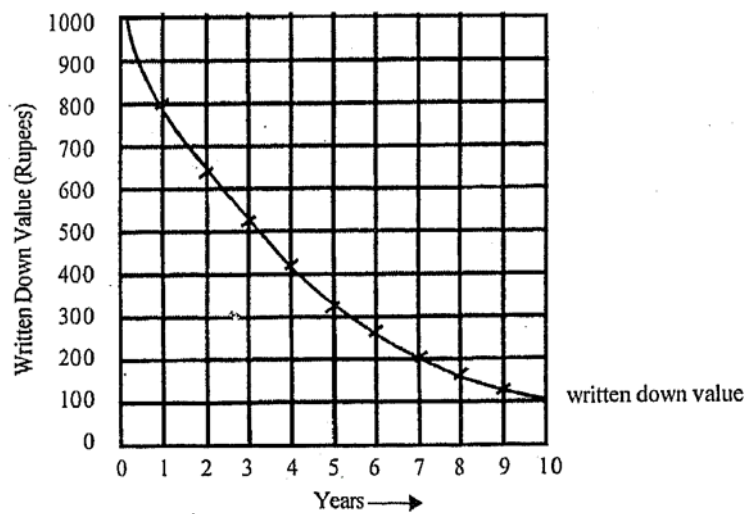
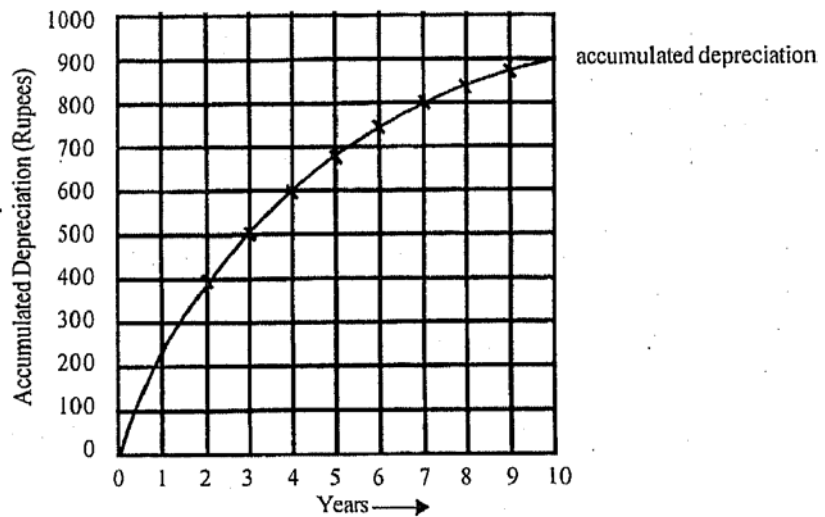
Annual depreciation under 'written down' value method is the highest during the first year and keeps on reducing over the subsequent years. This is shown by a rapidly declining curve (Figure 5.4). However, the rate of decline reduces as the number of



Rs. Figure 5.4: Written-down Value Method — Annual Depreciation Charge



Rs. Figure 5.5: Written-down Value Method — Accumulated Depreciation



years approaches end of the life of the asset. Accumulated depreciation, similarly, increases at a rapid rate during initial years and the rate of increase declines in later years (Figure 5.5). The 'written down' value of the asset is a declining curve (Figure 5.6). The unallocated portion of the cost is usually charged as depreciation in the last year of the life of the asset.



## Depreciation Method: Impact on profit Measurement

What we could learn from the discussion of the depreciation methods is that, depending on the method used, we have a different amount of charge for annual depreciation. It may also be noticed that over the entire life of an asset the total amount of depreciation charge cannot be different. Thus, the difference is only in terms of annual apportionment. The net effect of the methods is thus in terms of showing less or more profit in any particular year. This could be explained by continuing with the example.

Suppose that the company using the machine in our earlier example earns Rs.500 per annum before depreciation. The difference in annual measurement of profit under straight line and written down value methods will be as follows (Table 5.2):

**Table 5.2: Profits under Written Down Value and Straight Line Method of Depreciation**

(1) Year	(2) Profit before depreciation	(3) Straight line depreciation	(4) Net Profit under straight line method of depreciation (2) – (3)	(5) Written down value depreciation	(6) Net profit under written down value method of depreciation
	Rs.	Rs.	Rs.	Rs.	Rs.
1.	500	100	400	200	300
2.	500	100	400	160	340
3.	500	100	400	128	372
4.	500	100	400	102	398
5.	500	100	400	82	418
6.	500	100	400	66	434
7.	500	100	400	52	448
8.	500	100	400	42	458
9.	500	100	400	34	466
10.	500	100	400	134*	366
<b>Total</b>	<b>5,000</b>	<b>1,000</b>	<b>4,000</b>	<b>1,000</b>	<b>4,000</b>

\* Includes the unallocated depreciation charge, since there is no salvage value for the assets. Under this method there will always be a terminal unabsorbed depreciation. Figures are rounded off.

## 5.7 FORM OF PROFIT AND LOSS ACCOUNT

So far we have been discussing profit and loss account in the 'account' format. That is, listing all the revenues earned on the RHS and **all** the expenses incurred on the LHS showing **profit** in case of a credit balance and **loss** in case of a debit balance.

Modern practice is to present the information in a summarised statement giving the details in attached schedules. This achieves the same result because of the relationship:

$$\text{Revenue} - \text{Expense} = \text{Profit/Loss.}$$

We give below a condensed profit and loss account in both the formats. We shall then discuss the items presented. It may help you to copy out this profit and loss account since Subsequent discussions will be based on this example.





**TOOLS INDIA LTD.**  
**Profit and Loss Account**  
**For the year ending December 2003**

**(Rs. in Millions)**

<b>Debit</b>		<b>Credit</b>
Cost of goods sold (Schedule 3)	130	Sales net (Schedule 1) 255
Gross profit	<u>130</u>	Other income (Schedule 2) <u>5</u>
	260	<u>260</u>
Personal (Schedule 4)	49	
Depreciation (Schedule 5)	11	
Other Expenses (Schedule 6)	28	Gross Profit <u>130</u>
Operating profit	<u>42</u>	
	<u>130</u>	
Interest (Schedule 7)	12	
Profit before taxes	<u>30</u>	Operating income <u>42</u>
	<u>42</u>	
Income-tax provision	12	
Net profit after tax	18	Profit before taxation 30
	<u>30</u>	<u>30</u>

Alternatively, the same profit and loss account could be presented as follows:

**TOOLS INDIA LTD.**  
**Profit and Loss Account**  
**For the year ending December 2003**

**(Rs. in Millions)**

<b>Debit</b>		<b>Credit</b>
Sales	(Schedule 1)	255
Other income	(Schedule 2)	<u>5</u>
		260
Cost of goods sold	(Schedule 3)	<u>130</u>
		130
Gross profit		
Operating expenses:		
Personal	(Schedule 4) 49	
Depreciation	(Schedule 5) 11	
Other expenses	(Schedule 6) 28	88
		<u>88</u>
Operating Profit		42
Less: Interest expense	(Schedule 7)	12
Net Profit before Income Taxes		30
Less: Provision for Taxes		12
		<u>18</u>
Net Profit		<u>18</u>

The condensed profit and loss account will be accompanied by schedules providing

details of various items forming the total.



**Sales:** Net sales shown in the profit and loss account is after deducting Rs. 5 million from gross sales. Schedule I also provides the detailed break up of sales by different divisions of the company as also domestic market and export sales.

**Schedule 1: Sales**

		<b>(Rs. in Millions)</b>
Gross Sales		260
Less: Sales returns and allowances	1.75	
	<u>3.25</u>	5
Sales discount		<u>255</u>
Net Sales (inland)		
Machine Tools Group	83	
Watch Group	87	
Tractor Group	60	
Lamp Group	13	
Dairy Machinery Group	<u>2</u>	
		245
Export:		
Machine Tools Group	6	
Watch Group	2	
Others	<u>2</u>	10
Total Net Sales		<u>255</u>

**Sales Returns and Allowances:** Sales records are prepared as and when goods are shipped to Customers. Goods which are not according to specifications, damaged or defective may be returned by the customers and refund or credit sought.

Such refunds or allowances are separately accumulated for the purpose of control by management. At the time of preparation of profit and loss account such allowances are set off against the gross sales and net sales taken as operating revenue earned. Many companies may not disclose this information in published accounts.

**Sales Discount** is a reduction from invoice price granted for prompt payment of the invoice within a specified time limit. This is also sometimes called **cash discount**. In our example, Tools India Ltd. allowed Rs.3.25 million in discounts to customers.

It is usual practice to state the discount offered to customer on the invoice. Discounts or terms of payments are usually presented in short forms or symbols. They may be 'Net amount' or 'No cash discount' (N) Net Amount due at End of the Month (N/EOM); Net amount due in 30 days of invoice, no cash discounts (N/30); 5 per cent discount if payment is made in 10 days, net amount to be paid in 30 days (5/10, N/30).

An invoice of '5/10', N/30' simply means that 5 per cent discount will be allowed if payment is made within ten days. It also implies that by not paying in 10 days you could avail the normal credit of 30 days. Suppose you have Rs.1,000 invoice with '5/10,N/30'. You are losing 5 percent for 20 days credit. In other words it costs you  $360/20 \times 5\% = 90\%$  per annum in equivalent interest. This knowledge will definitely help you in planning your shortterm finances more effectively.

**Trade discounts** are used as adjustments in price and used when bulk sales are made by wholesaler to retailers. These are novel- brought into accounts. Rather, the sales are valued at net of trade discount.



**Other Income :** The revenue earned by an enterprise is usually bifurcated into two parts, operating income and non-operating income. Operating income usually refers to income derived from the main-line operations of the business. Other income, usually arises from activities incidental to the business. Schedule 2 lists the details of non-operating incomes of Tools India Ltd.

#### Schedule 2: Other Income

	Rs. in Millions
Interest - Banks	0.50
Interest- Staff and Office	1.20
Export incentives	1.80
Sales agency commission	0.50
Profit on sales of assets	0.30
Dividend on trade investment	0.20
Other Miscellaneous income	0.50
Total	5.00

### 5.8 COST OF GOODS SOLD

Cost of goods sold is very complex in case of a multi-product, multi-division company where you have large amounts of semi-finished goods. But in case of a trader, who deals in commodities and where each unit bought could be identified with each unit sold, it is very simple. We confront two major problems in this regard. First is with respect to changes in the price per unit of purchases. 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 in summary presented in our example could be understood more clearly from schedule 3.

#### Schedule 3: Cost of Goods Sold

	(Rs. in Millions)
Inventory	
Add: Purchases	110
Freight in	1
Other direct material costs	15
	216
Total goods available	
Less: Raw material and semi-finished	71
Inventory on December 31, 2003	
Goods available for sale	145
Less: Finished goods inventory on December 31, 2003	15
Cost of goods sold	130



## Activity 5.2

Relate items in Column A to all items	in Column B.
A	B
1. Gross Sales	1. Non-cash expense of the period
2. Sales returns and allowances	2. Total invoice value of goods sold during the period
3. Depreciation	3. Reduction from invoice price
4. Discounts	4. 2/5, N/30
	5. Given effect when goods are returned by customers
	6. Adjustments to recorded sales.

## 5.9 METHODS OF INVENTORY VALUATION

The only thing certain with respect to *price* normally is that they are not certain. This makes it necessary to evolve a strategy for charging, the cost of materials sold. Two of the most commonly used systems are the '**First in, First out**' (FIFO) which assumes that the sales are made in the order in which they are purchased and '**Last in, First out**' (LIFO), which assumes that goods which are bought last are sold first.

This could be illustrated with a simple example.

		No. of Units	Cost per Unit Rs.	Amount Rs.
January 1	Inventory	500	3	1,500
January 5	Purchases	1,000	4	4,000
January 10	Purchases	2,000	5	10,000
January 15	Purchases	1,000	6	6,000
January 20	Purchases	3,000	4	12,000
January 25	Purchases	2,000	7	14,000
	Total	<u>9,500</u>		<u>47,500</u>

		Units
January 11	Sales	1,000
January 14	Sales	500
January 16	Sales;	1,000
January 21	Sales	2,000
January 30	Sales	1,500
	Total	<u>6,000</u>

If we value the cost of sales on the basis of FIFO we have the following situation:



**Table 5.3: Cost of goods sold and inventory under FIFO**

Date	Quantity sold	Quantity Break-up	Rate	Amount	Total Amount
January 11	1,000	500	X 3	1,500	
		500	X 4	2,000	3,500
January 14	500	500	X 4	2,000	2,000
January 16	1,000	1,000	X 5	5,000	5,000
January 21	2,000	1,000	X5	5,000	
		1,000	X6	6,000	11,000
January 30	1,500	1,500	X4	6,000	6,000
Total Sales	6,000				27,500
Inventory	3,500	1,500	X4	6,000	
		2,000	X7	14,000	20,000
Total	9,500				47,500

Thus, cost of goods sold and inventory under FIFO are:

Cost of goods sold	27,500
Inventory	20,000
Total	<u>47,500</u>

If we follow LIFO the picture will be as follows (Table 5.4):

**Table 5.4: Cost of goods sold and inventory under LIFO**

Date	Quantity Sold	Quantity	Rate	Amount	Total Amount
January 11	1,000	1,000	x 5	5000	5,000
January 14	500	500	x 5	2,500	2,500
January 16	1,000	1,000	x 6	6,000	6,000
January 21	2,000	2,000	x 4	8,000	8,000
January 30	1,500	1,500	x 7	10,500	10,500
Total Sales	6,000				32,000
Inventory	3,500	500	x 3	1,500	
		1,000	x 4	4,000	
		500	x 5	2,500	
		1,000	x 4	4,000	
		500	x 7	3,500	15,500
Total	<u>9,500</u>				<u>47,500</u>

Thus, cost of goods sold and inventory under LIFO are:

	Rs.
Cost of goods sold	32,000
Inventory	15,500
Total	<u>47,500</u>



From the example above we find that the FIFO cost of goods sold, which is based on prices of inventory procured earliest prior to sales, would amount to Rs. 27,500. And the closing inventory of 3,500 units will be valued at Rs. 20,000 which is based on the most current purchase prices. The LIFO cost of goods sold, which is based on the most recent prices of the inventory purchased, is Rs.32,000. Closing inventory, based on the prices of earlier purchase, is valued at Rs. 15,500. In both cases inventory **plus** cost of goods sold amount to the same, that is, Rs. 47,500 since it is based on actual historical cost only.

Here again, over the entire life of the entity there will be no difference, irrespective of the method used in valuing the cost of goods sold. There will also be no difference if the entire inventory is sold. The differences again reflect one of the effects of accounting periods on income measurement.

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## 5.10 GROSS PROFIT

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Gross profit obtained by subtracting the cost of goods sold has great managerial significance. Cost of goods sold usually reflects the direct input costs which, to a great extent, are available with the volume of operations. In other words, per unit cost of goods sold holds a fixed relationship. The gross profit margin should be sufficient to cover operating expenses.

### Operating Expenses

All those expenses which are necessary to run the business enterprise but which are not directly associated with the company's output or production or trading are usually termed as operating expenses. Usually these expenses include all items of cost concerned with providing administrative and general support to business operations. It is the usual practice to segregate these costs as falling under two broad groups: selling and distribution and general administrative expenses. The latter also covers personnel expenses including staff and workmen's compensation and other benefits. In case of Tools India Ltd., details of the expenses on account of personnel are given in Schedule 4.

#### Schedule 4: Personnel Expenses

	(Rs in Millions)
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 expenses	5.00
<b>Total</b>	<b>49.00</b>

### Depreciation

Depreciation, as explained earlier, is the expiration of costs of fixed assets. It is usual practice to classify the depreciation expense for different groups of assets. In case of Tools India Ltd., Schedule 5 gives the break up of depreciation for different groups of assets.



## Schedule 5: Depreciation

	(Rs. in Millions)
Fixed Assets	9.84
Tools and Instruments	0.02
Patterns,, Jigs and Fixtures	1.14
Total	<u>11.00</u>

### Other Expenses

Other expenses' give detailed break up of most of the major items of operating expenses other than personnel, depreciation and financing costs. In case of tool India Ltd., the details are provided in Schedule 6.

## Schedule 6: Other Expenses

	(Rs. in 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
Training	0.10
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	<u>8.40</u>
Total	28.00

## 5.11 OPERATING PROFIT

Operating profit is the net result obtained from the operations after subtracting depreciation, personnel, and other expenses from gross profit. The amount is earned by the company irrespective of the method of financing, the only other expense to be met being interest expense. This is a measure of operational efficiency of the company, and is usually referred to as OPBIT (Operating Profit Before Interest And Taxes) or EBIT (Earning Before Interest And Taxes).

### Interest Expense.

Interest expense' arises out of management's decision to finance part of the expenses from borrowed funds. The level of interest expense represents the amount of risk the company is carrying in terms of fixed commitments, irrespective of the volume of operations and profit. Schedule 7 shows the different items of interest commitments of Tools India Ltd.

## Schedule 7: Interest



	Rs. In Millions
Debentures	0.58
Fixed Deposits	1.50
Loans from Government	5.00
Team loans from Banks/Financial Institutions	0.42
Cash Packaging credit from banks	3.50
Others	1.00
	<hr/>
Total	12.00

### Net Profit Before Tax

Net profit before tax is surplus after meeting all expenses including interest. This is the profit available to the company as a result of both operating and financing performance. This profit is usually referred to as PBT (Profit Before Tax) or EBT (Earnings Before Tax).

### Income Taxes

The profit before tax determines the level of taxation. As per the tax laws the amount of tax payable is not determined on the basis of reported net profit. In most cases accounting profit arrived at has to be reclassified and recomputed for determining the tax liability. Further, the tax liability, though certain, is determined only after the **tax assessment** is completed. This is the reason why tax liability is always provided or as a provision, implying that this liability is based on an estimate. When the amount is actually determined later on, it is set off against this provision.

## 5.12 NET PROFIT

This is the amount ultimately available to the company for appropriation. That is, this amount could be either distributed as dividends to shareholders (owners) or retained in the business as retained earnings, thereby increasing the owners' investment or equity in the business. This is variously referred to as PAT (Profit After Tax) or EAT (Earnings After Tax). After subtracting dividends declared, any surplus remaining is added to retained earnings, that is, Reserve and Surplus.

### Activity 5.3

Classify each item listed in Column A under appropriate classification in item B, assuming that the information relates to a small manufacturing firm.

A	B
1) Raw material consumed	i) Operating revenue
2) Interest received	ii) Non-operating revenue
3) Dividends received	iii) Cost of goods sold
4) Wages paid to workers	iv) Selling and distribution expenses
5) Carriage on goods sold	v) Administrative expenses
6) Carriage on goods purchased	vi) None of the above.
7) Salary of clerical staff	
8) Rent for office	
9) Power and fuel	





10. Selling agents' commission
11. Advertising
12. Auditors' fees
13. Sales tax
14. Municipal rates on office premises
15. Profit on sale of machinery
16. Bonus paid to workers
17. Sales discount
18. Purchase returns and allowances
19. Dividends paid
20. Interest expense on loans.

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### 5.13 SUMMARY

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In this unit we have developed and examined the profit and loss account. This account shows the net profit or earnings generated by the company. Thus, this measures the management's ability to generate income from assets.

The profit and loss account summarises the revenues and expenses of an accounting period. As a result of this summary it shows the net profit or net loss experienced by the company during the period. The reader of this account is provided with the past cost structure and profitability.

The net profit after payment of dividends shows the amount retained and hence links the balance sheet with the profit and loss account.

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### 5.14 KEY WORDS

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**Revenue:** Assets received from the sale of goods or services to customers. Also includes income generated from assets and investments usually classified as non-operating revenue. Revenues increase owners' equity.

**Expense:** Any reduction in owners' equity (total assets minus total liabilities) not resulting from distribution to owners. Represents expiration of costs, use or loss of an asset without being replaced by another asset.

**Realisation:** Recognition of the revenue in accounting based on the assumption that increase in owners' equity arises at the point of delivery or provision of goods or services.

**Accrual:** Income measured on the realisation of revenue independent of the timing of cash receipt and payment.

**Profit:** Revenue minus expenses for a given accounting period. Negative profit (income) is known as loss.

**Profit and Loss Account:** The final summary of all revenues, gains, expenses and losses during an accounting period. Shows the net profit or loss for the period.

**Depreciation:** The amortisation representing allocation of cost expiration of tangible fixed assets over their useful life.

**Cost:** The amount paid or to be paid for acquisition of goods or services.

**Matching:** Income measurement based on comparison of expenses and revenues of a period.

## 5.15 SELF-ASSESSMENT QUESTIONS/EXERCISES



1. Explain the following:
  - Realisation Concept
  - Accounting Period Concept
  - Matching Concept
2. When should revenue be recognised?
3. What are bad debts? In what way do we deal with the problem of possible bad debts in accounting?
4. What is depreciation and what is the rationale behind making a provision for depreciation in the process of matching income and expenses?
5. Differentiate between:
  - a) Straight Line method and Written Down Value method of providing depreciation:
  - b) Operating Profit and Net Profit
  - c) FIFO and LIFO methods of Inventory valuation.
6. Following is the summarised Profit and Loss Account of Shyam Enterprise for five consecutive periods. Complete the same by supplying missing information.

	1	2	3	4	5
Sales	1000		3000		5000
Cost of goods sold	500	800		2500	3000
Gross Profit		700	1000	1500	
Administrative expenses	100		300	400	
Selling and Distribution expenses	150	200		500	600
Operating Profit		200	400		1000
Other incomes	150		200		500
Net Profit before tax		300		1000	
Corporate Income Tax	200		300		
Profit after tax		150		500	800

7. Following information relates to Ramsons operations for a period ending December 31, 2002, the first year of operations. From this information complete the accompanying Profit and Loss Account and Balance Sheet.



Revenues and expenses of the period are as follows:

	<b>Rs.</b>
Depreciation expense	5,000
Purchases (raw material)	50,000
Wages	25,000
Purchase discount	5,000
Sales	1,00,000
Rent	3,000
Insurance	2,000
Returns inwards and allowances	2,000
Sales discount	1,000
Interest expenses	2,000
Miscellaneous expenses	5,000
Interest on deposits received	2,000

Balance shown by asset and liability accounts on 31st December 2002 is as follows:

Cash	15,000
Deposits with bank	20,000
Inventory of raw material	10,000
Land	10,000
Buildings and equipments	90,000
Advance tax paid	5,000
Tax Payable	?
Accounts receivable	20,000
Accounts Payable	19,500
Capital	75,000
Long term loan	50,000
Retained earning	?

**RAMSONS**

**Profit and Loss Account**

**For the Year ending 31<sup>st</sup> December 2002**

	<b>Rs.</b>		<b>Rs.</b>
Inventory Consumed	_____	Sales	_____
Wages	_____	Less: returns and	_____
Gross Profit	_____	Allowances	_____
Depreciation expense	_____	Gross Profit	_____
Rent	_____	Purchase discount	_____
Sales discount	_____		
Insurance	_____		
Interest expenses	_____		
Miscellaneous expenses	_____		
Operating Profit	_____	Operating Profit	_____
Net Profit before tax	_____	Interest on deposite	_____
Income Tax @ 50%	_____	Net Profit before tax	_____
Profits retained	_____		

**RAMSONS**  
**Balance Sheet**



As on 31<sup>st</sup> December 2002

	Rs.		Rs.
<b>Assets</b>		<b>Liabilities and Capital</b>	
<b>Current Assets</b>		<b>Capital Liabilities</b>	
Cash		Account payable	
Deposite with bank		Tax payable	
Account receivable		Total current liabilities	
Inventory			
Advance tax paid		Long – Term Loan	
Total Current assets		Capital	
		Retained earnings	
<b>Fixed Assets</b>			
Land			
Building & equipment			
Less: Accumulated depreciation			

8. The following are the balances taken on 31<sup>st</sup> December, 2002 from the books of account of Western Plastics Limited:

	Rs
Preference share capital	100,000
Ordinary share capital	90,000
Investments at cost (a) quoted	32,000
(b) unquoted	75,500
Freehold land and buildings at cost	81,000
Plant and machinery at cost	198,500
Share premium account	50,000
9% Debentures (secured on property)	40,000
Provision for depreciation to 31st Dec. 2001	
Freehold land and buildings	7,600
Plant and machinery	33,800
General reserve	16,500
Bank overdraft	13,080
Creditors	18,830
Sales turnover	4,10,760
Cost of goods sold	2,98,460
Audit fee	6,000
Debtors	30,720
Retained earnings	27,400
Income from quoted investments	1,560
Income from unquoted investments	4,220
Administration expenses	6,200
Legal expenses	340
Bank interest	1,100
Establishment expenses	4,230
Directors emoluments	6,520
Debenture interest	3,600
Preference dividend	5,000
Ordinary dividend-interim	4,500
Merchandise Inventory 31st Dec. 2002	60,080
	8,13,750
	8,13,750



In addition, the following information is available:

- a) The authorised share capital is:
- 20,000 10% Preference shares of Rs. 10 each,  
24,000 Ordinary shares of Rs. 10 each
- b) All the issued ordinary shares are fully paid
- c) Depreciation to be provided for 2002 as follows
- |             |             |
|-------------|-------------|
| Property    | 2% on cost  |
| Plant, etc. | 10% on cost |
- d) Provide for the preference dividend due.
- e) A final dividend of 10% on the ordinary shares is proposed Ignore taxation. With the help of the above information:
- i) Prepare an income statement for the year ended 31 st December, 2002 and a Balance Sheet as at that date.
- ii) Comment on the salient features of the financial statements you have prepared so far as they provide meaningful information for users' needs.
- iii) Identify the main information objectives of shareholders and assess the extent to which these objectives are satisfied by the financial accounts you have prepared

### Answers to Activities

#### Activity 5.1

- 1) Revenue and expenses
- 2) Revenue
- 3) Expenses to revenues
- 4) Expired costs or expenses
- 5) Accrues
- 6) Decrease
- 7) Revenue, accounting.

#### Activity 5.2

(1) A 1-B2 (2) A2-B 5, B6 (3) A3-B 1 (4) A4-B3, B4

#### Activity 5.3

1 (iii) 2. (ii) 3, 4. (iii) 5.(iv) 6. (iii) 7. (v) 8.(v) 9.(iii) 10.(iv) 11. (iv) 12.(v) I<sup>n</sup>. (vi) 14. (v) 15. (ii) 16. (iii) 17.(iv) 18.(iii) 19. (vi) 20. (v).



7 Solution:

**RAMSONS**  
**Profit And Loss Account**  
**For the Year ended 31<sup>st</sup> December, 2002**

	Rs	Rs		Rs	Rs
Purchases	50,000		Sales	1,00,000	
Less Inventor}	10,000*				
Inventory consumed	40,000				
Less purchase	1,0011	39,000	Less: Returns and	2,000	96,500
Wages		25,000	Sales discount	1,500	
Gross profit		32,500			
		96,500			96,500
Denreciation expense		5,000	Grass Profit		32,500
Rent		3,000			
Sales Discount		2,000			
Insurance		2,000			
Interest expense		2,000			
Miscellaneous		5,000			
Operating Profit		18,500			
		32,500			32,500
Net Profit before tax		20,500	Operating Profit		18,500
		20,500	Interest on deposit		2,000
		20,500			20,500
Incnmc '(e. 5(1 %		10,250	Net Profit before fax		20,500
Profit Retained		10,250			
		20,500			20,500

- Inventory figure has been obtained from the balances shown under asset and liability accounts.



<b>Assets</b>		<b>Liabilities and Capital</b>	
<b>Current Assets</b>	<b>Rs.</b>	<b>Current Liabilities</b>	<b>Rs</b>
Cash	15,000	Accounts payable	10
Deposit with bank	20,000	Taxes payable	18
Accounts receivable	20,000		
Inventory	10,000	Total current liabilities	28
Advance tax paid	5,000	Long Term Loan	50
			00
Total current assets	70,000	Capital	75
		Retained earnings	10
			50
<b>Fixed Assets</b>			
Land	10,000		
Buildings and equipment	90,00		
Less: Accumulated depreciation	5,000		
	85,000		
	1,65,000		1,16,50

8.      Gross Profit Rs. 1,52,300                      Balance Sheet Total Rs. 4,14,930.  
           Operating Profit Rs. 74,400  
           Net Profit Rs. 45,120

## **5.16 FURTHER READINGS**

- Fraser, L.M. and Ormiston. Ailen 04/10/2003, *Understanding Financial Statements* Prentice Hall : New Delhi (Chapter 3)
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- Khan M.Y. and Jain P.K., 2002, *Cost Accounting Land Financial Management*, Tata McGraw Hill (Chapter 3)
- Bhattacharya, S.K. and John Dearden, 1984. *Accounting for Management Text and Cases* (2nd Ed) Vani: New Delhi. (Chapters 4,8,9 & 10.)
- Glautier M. W.E., Underdown B. and A.C. Clark, 1979. *Basic Accounting Practivce* Arnold Hieneman: New Delhi. (Chapters 2-4)
- Hingorni N.L. and A.R. Ramanathan, 1986. *Management Accounting Sultan Chand* New Delhi. (Chapters 3-5)
- Meigs W.B. and Robert E. Meigs, 1987. *Accounting : The Basis For Business Decisions* (7th Ed.), McGraw-Hill : New York. (Chapters 3 and 4.)