# FINANCIAL ACCOUNTING - II <br> Edited By <br> Dr. Rupesh Roshan Singh 

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Phagwara

## SYLLABUS

## Financial Accounting - II

Objectives: The course will enable the students to maintain the accounts of partnership firms, branch accounts, departmental accounts and hire purchase accounts. The students will also be able to calculate the amount of claims in case of fire insurance policy and loss of profit policy.

| Sr. No. | Content |
| :---: | :--- |
| $\mathbf{1}$ | Partnership Accounts: Meaning, Partnership deed, Guarantee, Adjustment of <br> closed partnership accounts |
| $\mathbf{2}$ | Distribution of Profit: Preparation of adjusted profit \& loss a/c, Appropriation <br> of profit \& Loss account. |
| $\mathbf{3}$ | Admission of partner: Adjustment regarding profit sharing ratio, Treatment of <br> goodwill, adjustment regarding revaluation of assets \& liabilities, partner's <br> capitals and Balance sheet of the new firm. |
| $\mathbf{4}$ | Retirement of partner: adjustment regarding goodwill, revaluation of assets and <br> liabilities, undistributed profits, computation of partners' interest and mode of <br> payment. |
| $\mathbf{5}$ | Death of partner and joint life policy. |
| $\mathbf{6}$ | Dissolution of partnership. Garner v/s Murray rule including Insolvency of firm. <br> Piecemeal Distribution. |
| $\mathbf{7}$ | Departmental Accounts including inter departmental transfers at cost and invoice <br> price. |
| $\mathbf{8}$ | Branch Accounting. |
| $\mathbf{9}$ | Hire Purchase Accounts, Lease purchase accounts. |
| $\mathbf{1 0}$ | Insurance claim: Loss of stock Policy, Insolvency accounts. |

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Unit 1: Partnership Accounts
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1.4 Summary
1.5 Keywords
1.6 Review Questions
1.7 Further Readings

## Objectives

After studying this unit, you will be able to:

- Prepare partnership accounts
- Construct partnership deed
- Illustrate the guarantee of profit to a partner


## Introduction

In the present unit, you will study about the accounts of partnership firm. After studying this unit, you will be able to understand the nature of partnership firm, partnership deed, some special aspects of partnership accounts like guarantee of profit to a partner. We know that the sole proprietary firms have their operations at a small level. As the business expands, firms need more capital and people to manage the business and share its risks. In such a situation, people usually adopt the partnership form of organisation

Notes
The Indian Partnership Act was passed in 1932 to define and amend the law relating to partnership. Indian Partnership Act is one of the old mercantile law. It is a special type of Contract. Initially, this was a part of Indian Contract Act itself but later converted into a separate Act in 1932.

## Notes <br> 1.1 Meaning

A partnership is like a proprietorship in many ways except that it has two or more co-owners. The partners share the profits and losses according to a sharing pattern already agreed. Persons who have entered into partnership with one another are individually called 'partners' and collectively called 'firm'. The name under which the business is carried is called the 'firm's name'. A partnership firm has no separate legal entity, apart from the partners constituting it.

A partnership must be dissolved if the ownership changes, as when a partner leaves or dies. If the business is to continue as partnership, a new partnership must be formed. Both, sole proprietorship and partnership are convenient ways of separating the business owner's commercial activities from their personal activities. But legally, there is no economic separation between the owners and the businesses.

Caution In India, partnership is restricted to 10 partners in case of business in banking and to 20 persons in other cases.

The following are the key characteristics of a partnership firm:

1. Two or More Persons: A partnership firm should have at least two persons and their objective should be the same. The Partnership Act does not put any restrictions on maximum number of partners. However, section 11 of Companies Act prohibits partnership consisting of more than 20 members, unless it is registered as a company or formed in pursuance of some other law. If a firm is engaged in the banking business, it can have a maximum of 10 partners while in case of any other business, the maximum number of partners can be 20 .
2. Agreement: As per normal provision of contract, a 'partnership' agreement can be either oral or written. Agreement in writing is necessary to get the firm registered. Similarly, written agreement is required, if the firm wants to be assessed as 'partnership firm' under Income Tax Act. A written agreement is advisable to establish existence of partnership and to prove rights and liabilities of each partner, as it is difficult to prove an oral agreement. However, written agreement is not essential under Indian Partnership Act.
3. Business: The partnership agreement should be for some business purpose. For example, if A and B jointly purchase a plot of land, they become the joint owners of the property and not the partners. But if they are in the business of purchase and sale of land for the purpose of making profit, they will be called partners.
4. Mutual Agency: The business of firm can be carried on by all or any of them for all. Any partner has authority to bind the firm. Act of any one partner is binding on all the partners. Thus, each partner is 'agent' of all the remaining partners. Hence, partners are 'mutual agents'.
5. Sharing of Profit: The partners must come together to share profits and losses of the business. Thus, if one member gets only fixed remuneration (irrespective of profits) or one who gets only interest and no profit share at all, is not a 'partner'. Though the definition contained in the Partnership Act describes partnership as relation between people who agree to share the profits of a business, the sharing of loss is implied. Thus, sharing of profits and losses is important. If some persons join hands for the purpose of some charitable activity, it will not be termed as partnership.
6. Unlimited Liability: All the partners of a partnership firm are jointly and severally liable to the third part for their act. The liability of a partner is unlimited it means there personal property can be used to pay the debt of the firm.
7. Minors admitted to the Benefits of Partnership: A person who is a minor according to the law to which he is subject may not be a partner in a firm, but, with the consent of all the partners for the time being, he may be admitted to the benefits of partnership.
8. Partnership Firm is not a Legal Entity: Partnership firm is not a legal entity. It has limited identity for purpose of tax law. As per section 4 of Indian Partnership Act, 1932, 'partnership' is a relation between persons who have agreed to share the profits of a business carried on by all or any one of them acting for all. Under partnership law, a partnership firm is not a legal entity, but only consists of individual partners for the time being.

## Self Assessment

State whether the following statements are true or false:

1. A partnership firm has separate legal entity.
2. The maximum numbers of partners for a banking business are 20.
3. The liability of a partner is unlimited.
4. A minor can be a partner in a firm.
5. Under partnership law, a partnership firm is not a legal entity, but only consists of individual partners for the time being.

### 1.2 Partnership Deed

Partnership deed is an agreement among the partners. The agreement can be either oral or written. There is no legal obligation under the Partnership Act for written agreement. But wherever it is in writing, the document, which contains terms of the agreement, is called 'Partnership Deed'. The deed generally contains the details about all the aspects affecting the relationship between the partners including the objective of business, contribution of capital by each partner, ratio in which the profits and the losses will be shared by the partners and entitlement of partners to interest on capital, interest on loan, etc. The clauses of partnership deed can be altered with the consent of all the partners. The deed should be properly drafted and prepared as per the provisions of the 'Stamp Act' and preferably registered with the Registrar of Firms.

### 1.2.1 Contents of a Partnership Deed

The following are the key contents of a partnership deed:

- Names and Addresses of the firm and its main business
- Names and Addresses of all partners
- Amount of capital to be contributed by each partner
- The accounting period of the firm
- The date of commencement of partnership
- Rules regarding operation of Bank Accounts
- Profit and loss sharing ratio
- Rate of interest on capital, loan, drawings, etc.
- Mode of auditor's appointment, if any
- Salaries, commission, etc., if payable to any partner

Notes - The rights, duties and liabilities of each partner

- Treatment of loss arising out of bankruptcy of one or more partners
- Settlement of accounts on dissolution of the firm
- Method of settlement of disputes among the partners
- Rules to be followed in case of admission, retirement, death of a partner
- Any other matter relating to the conduct of business.

Normally, the partnership deed covers all matters affecting relationship of partners amongst themselves. However, if there is no express agreement on certain matters, the provisions of the Indian Partnership Act, 1932 shall apply.

### 1.2.2 Special Aspects of Partnership Accounts

Normally, a partnership deed covers all matters relating to the mutual relationship amongst the partners but if the deed is silent on certain matters or in the absence of any deed or an express agreement, the relevant provisions of the Partnership Act shall become applicable. It is, therefore, necessary to know the provisions of the Act, which have a direct bearing on the accounting treatment of certain items. These are as follows:

1. Profit Sharing: The partners shall share the profits of the firm equally irrespective of their capital contribution.
2. Interest on Capital: No interest is allowed to partners on the capital contributed by them. Where, however, the agreement provides for interest on capital, such interest is payable only out of the profits of the business. In other words, if there are losses, interest on capital will not be allowed even if the agreement so provides.
3. Interest on Advances: If any partner, apart from his share of capital, advances money to the firm as a loan, he is entitled to interest on such amount at the rate of 6 percent per annum. Such interest shall be paid even out of the assets of the firm. This means that interest on loan shall be paid even if there are losses.
4. Interest on Drawings: No interest will be charged on drawings made by the partners.
5. Remuneration to Partners: No partner is entitled to get salary or other remuneration for taking part in the conduct of the business of the firm unless there is a provision for the same in the Partnership Deed.

### 1.2.3 Practical Problems for Computation of Interest on Capital and Drawings

## Computation of Interest on Capital

Interest on drawings can be calculated by the following methods:

1. Direct Method: Under direct method simple interest is to be calculated by taking the principal amount, period and rate of interest.
2. Product Method: Alternately interest can be calculated by product method. Under this method the amount of interest is calculated by converting the principal amount into monthly products depending upon number of months for which principal amount remained in business. Then the interest is calculated by taking monthly rate of interest.

$=E$
Example: Raj and Amit are partners with a capital of ₹ $1,00,000$ and $₹ 1,60,000$ on January 1,2009 respectively. Raj introduced additional capital of ₹ 30,000 on July 1, 2009 and another ₹ 20,000 on October 31, 2009. Calculate interest on capital for the year ending 2009. The rate of interest is 6\% p.a.

## Solution:

Computation of Interest on capital of Raj
On ₹ $1,00,000$ for 12 month @ $6 \% \quad=1,00,000 \times 6 / 100 \times 12 / 12=₹ 6,000$
On ₹ 30,000 for 6 month @ 6\%
$=30,000 \times 6 / 100 \times 6 / 12=₹ 900$
On ₹ 20,000 for 2 month @ 6\%

$$
=20,000 \times 6 / 100 \times 2 / 12=₹ 200
$$

Total interest on Raj's capital

$$
\begin{aligned}
& \text { = ₹ } 6,000+₹ 900+₹ 200 \\
& =₹ 7100
\end{aligned}
$$

屋
Amit
$\begin{aligned} \text { On ₹ } 1,60,000 \text { for } 12 \text { month @ } 6 \% & =1,60,000 \times 6 / 100 \times 12 / 12 \\ & =₹ 9600\end{aligned}$

Example: (Product Method)
Using the above statement calculate the interest on capital by product method.

## Solution:

Computation of Interest on capital of Raj

| Amount (₹) | Months | Product |
| :--- | :--- | ---: |
| 100000 | 12 | 1200000 |
| 30000 | 6 | 180000 |
| 20000 | 2 | 40000 |
| Total product |  | 1420000 |

Interest on Capital $=₹ 1420000 \times \frac{6}{100} \times \frac{1}{12}=₹ 7100$
Computation of Interest on Capital of Amit

$$
\begin{aligned}
& =₹ 1,60,000 \times 12=₹ 19,20,000 \\
& 1920000 \times \frac{6}{100} \times \frac{1}{12}=₹ 9600
\end{aligned}
$$

## Computation of Interest on Drawings

The following are the methods of calculating interest on drawings:

1. Simple Average method
2. Product method

## Notes

## Simple Average Method

A fixed amount may be withdrawn every month/half yearly/annually. The interest has to be calculated for the period for which the amount has been utilised for personal purposes by the partners. The following example explains the computation of interest on drawings by using simple average method.

F
Example: Mr. Rohit withdrew ₹ 2,000 per month from the firm for his personal use during the year ending December 31, 2009. Money is withdrawn at the beginning of the period and interest is charged at the rate of $12 \%$ per annum. Compute the amount of interest on drawings.

## Solution:

| Date of drawings | Amount withdrawn | Period (in Month) |
| :--- | :---: | :---: |
| 1 January 2009 | 2,000 | 12 |
| 1 February 2009 | 2,000 | 11 |
| 1 March 2009 | 2,000 | 10 |
| 1 April 2009 | 2,000 | 9 |
| 1 May 2009 | 2,000 | 8 |
| 1 June 2009 | 2,000 | 7 |
| 1 July 2009 | 2,000 | 6 |
| 1 August 2009 | 2,000 | 5 |
| 1 September 2009 | 2,000 | 4 |
| 1 October 2009 | 2,000 | 3 |
| 1 November 2009 | 2,000 | 2 |
| 1 December 2009 | 2,000 | 1 |

$$
\begin{aligned}
\text { Average Period } & =\text { Total of months } / 12 \\
& =78 \text { months } / 12 \\
& =6 \frac{1}{2} \text { months }
\end{aligned}
$$

Interest on Drawings $=24000 \times \frac{12}{100} \times \frac{13}{2} \times \frac{1}{12}$

$$
\text { = ₹ } 1560
$$

Example 2: In the above example Rohit withdraws the money at the beginning of the period but in case if he withdraws the money at the end of the period the interest on drawings will be calculated as follows:

| Date of drawings | Amount withdrawn | Period (in Month) |
| :--- | :---: | :---: |
| 31 January 2009 | 2,000 | 11 |
| 28 February 2009 | 2,000 | 10 |
| 31 March 2009 | 2,000 | 9 |
| Contd... |  |  |


| 30 April 2009 | 2,000 | 8 |
| :--- | :--- | :--- |
| 31 May 2009 | 2,000 | 7 |
| 30 June 2009 | 2,000 | 6 |
| 31 July 2009 | 2,000 | 5 |
| 31 August 2009 | 2,000 | 4 |
| 30 September 2009 | 2,000 | 3 |
| 31 October 2009 | 2,000 | 2 |
| 30 November 2009 | 2,000 | 1 |
| 31 December 2009 | 2,000 | 0 |
|  | 24,000 | 66 months |

Average Period = Total of months/12
$=66$ months $/ 12$
$=5 \frac{1}{2}$ months
Interest on Drawings $=₹ 24000 \times \frac{12}{100} \times \frac{11}{2} \times \frac{1}{2}$

$$
\text { = ₹ } 1320
$$

In the same way if money is withdrawn at the middle of the month or after a fixed interval the number of months and interest will be calculated accordingly.

## Product Method

The following example illustrates the computation of interest on drawings by using product method:

Example: The given below is the details of amount withdrawn by Mr X for his personal use form the firm during the financial year 2009:

| Date | Amount (₹) |
| :--- | :---: |
| Jan. 1, 2009 | 10,000 |
| April 1, 2009 | 10,000 |
| July 1, 2009 | 10,000 |
| Oct. 1, 2009 | 10,000 |

The interest on drawings is calculated @ $8 \%$. Compute the interest on drawings of Mr. X.
Solution:
Statement showing calculation of Interest on Drawings

| Date | Amount (₹) | Time Period | Product (₹) |
| :--- | :--- | :--- | :--- |
| Jan. 1, 2009 | 10,000 | 12 months | $1,20,000$ |
| April 1, 2009 | 10,000 | 9 months | 90,000 |$\quad$ Contd...


| July 1, 2009 | 10,000 | 6 months | 60,000 |
| :--- | :--- | :--- | :--- |
| Oct. 1,2009 | 10,000 | 3 months | 30,000 |
| Total | 40,000 |  | $3,00,000$ |

Interest on drawing $=$ Total of Product $\times$ interest rate $\times 1 / 12$

$$
\begin{aligned}
& =₹ 3,00,000 \times 8 / 100 \times 1 / 12 \\
& =₹ 2,000
\end{aligned}
$$

## Self Assessment

Fill in the blanks:
6. ..................... is a written agreement among the partners.
7. No interest will be charged on drawings made by the partners in absence of the $\qquad$
8. There is no legal obligation under the $\qquad$ for written agreement.
9. If there is no express agreement on certain matters, the provisions of the $\qquad$ shall apply.
10. The partners shall share the profits of the firm $\qquad$ irrespective of their capital contribution.
11. If any partner, apart from his share of capital, advances money to the firm as a loan, he is entitled to interest on such amount at the rate of $\qquad$ per annum.

### 1.3 Guarantee of Profit to a Partner

Guarantee is an assurance that a partner will not get as his share of profit less than the guaranteed amount. There may be two situations:

1. Guarantee to one partner by (others) the firm,
2. Guarantee to a partner by another partner individually
3. Guarantee to one partner by (others) the firm: Sometimes, a partner is guaranteed a minimum amount by way of his share in the profits of the firm. Such a guarantee may be given to an existing partner or to a new partner at the time of admission. Such guaranteed amount shall be paid to partner when his share of profit, as calculated, according to his profit sharing ratio is less than the guaranteed amount. The deficiency of such guaranteed amount will be borne by the other partner's in their profit sharing or agreed ratio as the case may be.

Example: S and M are partners and they decide to admit A into the partnership firm. The profit sharing ratio is agreed as $3: 2: 1$ with a guaranteed amount of ₹ 5,000 to A. For the year ended 2001, the business earns a profit of ₹ 24,000 . A's share works out to ₹ $4,000(1 / 6$ of $₹ 24,000$ ). This is ₹ 1,000 less than the guaranteed amount of ₹ 5,000 . Hence, A will get ₹ 4,000 as her share of the profit in the profit sharing ratio and the deficiency of ₹ 1,000 (i.e. the amount by which ₹ 4,000 falls short of the guaranteed amount) shall be transferred to the credit of A by transfer from $S$ and $M$ in their profit sharing ratio, i.e. $3: 2$.
$\mathrm{X}, \mathrm{Y}$ and Z are in partnership sharing profits in the ratio of $3: 2: 1$. Z share in profit has been guaranteed by $X$ and $Y$ to be a minimum sum of ₹ 8,000 . Profits for the year ended March 31, 2006 was ₹ 36,000 . Divide profit among the partners.
Hint: Profit to X ₹ 16,800; Y, ₹ 11,200; Z, ₹ 8,000.
2. Guarantee to a partner by another partner individually: The guarantee to an existing or incoming partner may be given by all the old partners or any of them in their new profit sharing ratio or an agreed basis.

5
Example: Kim and Lal are partners in a firm sharing profit in the ratio of $2: 1$. They decide to include Mohit with $1 / 4$ th share in profits with a guaranteed amount of ₹ 25,000 . Kim undertook to meet the liability arising out of the guaranteed amount to Mohit. The profit sharing ratio between Kim, Lal and Mohit will be $2: 1: 1$. The firm earned profit of ₹ 76,000 for the year ended March 31, 2001.
You are required to prepare Profit and Loss Appropriation Account and show the distribution of profit amongst the partners.

## Solution:

The Profit and Loss Appropriation Account will be prepared as follows:
The Profit and Loss Appropriation Account for the year ended March 31, 2001

Dr.
Cr.

| Particulars | Amount <br> (₹) | Particulars | Amount <br> (₹) |  |
| :--- | ---: | ---: | ---: | :---: |
| Share of Profit | 38,000 |  | Net Profit as per profit and loss account | 76,000 |
| Kim (2/4 of 76,000) | 6,000 | 32,000 |  |  |
| Less: Mohit's deficiency (2/3 of <br> $9,000)$ |  | 19,000 |  |  |
| Lal (1/4 of 76,000) | 19,000 |  |  | 76,000 |
| Mohit $(1 / 4$ of 76,000$)$ | 6,000 | 25,000 |  |  |
| Add: deficiency borne by Kim |  | 76,000 |  |  |

Notes
The minimum guaranteed amount to Mohit is ₹ 25,000 whereas, his share of profit as per the profit sharing ratio works out to be $₹ 19,000$ only. Hence, there is a shortfall of ₹ 6,000 . This amount will be borne by Kim.

## Notes

## Self Assessment

Fill in the blanks:
12. $\qquad$ . is an assurance that a partner will not get as his share of profit less than the guaranteed amount.
13. Guarantee can be provided by the firm or $\qquad$
14. The deficiency of guaranteed amount under guarantee to one partner by others will be borne by the other partner's in their profit sharing or $\qquad$ as the case may be.
15. The guarantee to an existing or incoming partner may be given by all the old partners or any of them in their $\qquad$ or an agreed basis.

### 1.4 Summary

- "Partnership" is the relation between persons who have agreed to share the profits of business carried on by all or any to them acting for all.
- Persons who have entered into partnership with one another are called individually "partners" and collectively "a firm", and the name under which their business is carried on is called the "firm name".
- The essential features of partnership are: (i) To form a partnership, there must be at least two persons; (ii) It is created by an agreement; (iii) The agreement should be for carrying on some legal business; (iv) sharing of profits and losses; and (v) relationship of mutual agency among the partners
- Partnership deed is the written agreement between the partners to run the business smoothly.
- Normally, a partnership deed covers all matters relating to the mutual relationship amongst the partners.
- If the deed is silent on certain matters or in the absence of any deed or an express agreement, the relevant provisions of the Partnership Act shall become applicable.
- Sometimes, a partner is guaranteed a minimum amount by way of his share in the profits of the firm
- The guarantee to an existing or incoming partner may be given by all the old partners or any of them in their new profit sharing ratio or an agreed basis.


### 1.5 Keywords

Drawings: Drawings is the amount borrowed by the partners from the firm for their personal use.

Mutual Agency: The business of a firm can be carried on by all or any of them for all. Any partner has the authority to bind the firm.

Partnership Deed: Partnership deed is the written agreement among the partners.

### 1.6 Review Questions

1. Normally, a partnership deed covers all matters relating to the mutual relationship amongst the partners but if the deed is silent on certain matters or in the absence of any deed or an express agreement, the relevant provisions of the Partnership Act shall become applicable. What are the provisions of the act, which have direct bearing on the accounting treatment of certain items?
2. Illustrate the accounting treatment for distribution of profit among the partners, when a partner is guaranteed a minimum amount by way of his share in the profits of the firm.
3. Construct the proforma of partnership deed covering all the important aspects affecting the relationship of partners.
4. A and B are partners in a firm. On January 1, 2006 their capital is ₹ 3,00,000 and $₹ 2,00,000$ respectively. Their drawings during the year were ₹ 3,000 per month each. They allowed $6 \%$ interest on capital. The profit for the year ₹ $4,00,000$. Calculate interest on capital when capitals are fixed.
5. $\quad X$ and $Y$ are equal partners. They withdrew $₹ 4,000$ each per month. Calculate interest $4 \%$ p.a. on drawing if they withdrew in the beginning of each month.
6. The deed generally contains the details about all the aspects affecting the relationship. Discuss.
7. $\quad \mathrm{R}$ and A are partners with a capital of $₹ 50,000$ and $₹ 80,000$ on April 2005, respectively. R introduced additional capital of ₹ 50,000 on 1st Jan 2006. Calculate interest on capital @10 p.a. on March 31, 2006.
8. Aman withdrew ₹ 2000 p.m. from business for personal use at the end of every month during the year. Calculate interest on Drawing @10 p.a.
9. Critically evaluate the preparation of partnership deed by a partnership firm.
10. "Partnership is relation between persons who have agreed to share profits of a business carried on by all or any of them acting for all". Discuss.

## Answers: Self Assessment

1. False
2. True
3. True
4. partnership deed
5. Indian Partnership Act, 1932
6. 6 percent
7. individual partner
8. new profit sharing ratio
9. False
10. False
11. Partnership deed
12. Partnership Act
13. equally
14. Guarantee
15. agreed ratio

## Notes $\quad$ 1.7 Further Readings

Books<br>I.M. Pandey, Financial Management, Vikas Publishing, New Delhi.<br>Khan and Jain, Management Accounting.<br>Nitin Balwani, Accounting \& Finance for Managers, Excel Books, New Delhi.<br>Prasanna Chandra, Financial Management - Theory and Practice, Tata McGraw Hill, New Delhi (1994).<br>R.L. Gupta and Radhaswamy, Advanced Accountancy.<br>S. Bhat, Financial Management, Excel Books, New Delhi.<br>S.N. Maheswari, Management Accounting.<br>V.K. Goyal, Financial Accounting, Excel Books, New Delhi.<br>Online link www.futureaccountant.com

## Unit 2: Distribution of Profit

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2.2 Appropriation of Profit \& Loss Account
2.3 Preparation of Adjusted Profit and Loss Account
2.4 Summary
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2.7 Further Readings

## Objectives

After studying this unit, you will be able to:

- Make adjustment of closed profit partnership account
- Prepare adjusted profit and loss A/c
- Construct appropriation of profit and loss $\mathrm{A} / \mathrm{c}$


## Introduction

In partnership form of business, the net profit is to be shared by all the partners in the agreed profit sharing ratio after charging the interest on capital, partners' salary and commission and after taking into account the interest on drawings. As stated earlier, in the absence of any specific agreement to this effect, the profit is to be distributed equally among the various partners.

### 2.1 Adjustment of Closed Partnership Accounts

Sometimes a few omissions or errors in the recording of transactions or the preparation of summary statements are found after the final accounts have been prepared and the profits distributed among the partners. The omission may be in respect of interest on capitals, interest on drawings, interest on partners' loan, partner's salary, partner's commission or outstanding expenses. There may also be some changes in the provisions of partnership deed or system of accounting having impact with retrospective effect. All these acts of omission and commission need adjustments for correction of their impact.

## Notes

## $09^{3}$

Did u know? What are the different types of capital?
The capital may be fixed or fluctuating:
(a) Fixed Capital Account: Two separate accounts are kept for each partner, i.e. 'capital account' and 'current account'.
(b) Fluctuating Capital Account: Only one account for each partner is kept, i.e. capital account.

The following procedure may be helpful in recording necessary adjustments:

1. If, interest on capital is one of the items of omissions, then first verify the partners' capital at the beginning. This can be done by deducting partners' share of current year's profit from their capitals at the end and adding their drawings thereto.
2. Work out the amounts of omitted items that are to be credited to partners' capital accounts such as interest on capital, salaries to partners, etc. The following journal entry for the adjustment is recorded:
Profit and Loss Adjustment A/c Dr.

To Partners' Capital A/c (individually)
3. Work out the amounts of omitted items which are to be debited to the Partners' Capital Accounts such as interest on drawings. The following adjustment entry recorded:

Partners' Capital (individually) A/c
Dr.

## To Profit and Loss Adjustment A/c

4. Work out the balance of the Profit and Loss Adjustment Account. The credit balance of the Profit and Loss Adjustment Account reflects to the profit and the debit balance and the loss. This is to be distributed among the partners.
5. The balance of the Profit and Loss Adjustment Account as worked out in point 4 above be transferred to the partners' capital accounts in their profit sharing ratio. Thus, the Profit and Loss Adjustment Account will stand closed. It will involve the following journal entry:

If it is a credit balance (profit)

Profit and Loss Adjustment A/c
To Partners' Capital (individually) A/c
If it is a debit balance (loss)
Partners' Capital (individually) A/c
Dr.

To Profit and Loss Adjustment A/c


Caution The adjustment can also be made directly in the Partners' Capital Accounts without preparing a Profit and Loss Adjustment Account. In such a situation, we shall prepare a statement to find out the net effect of omissions and commissions and then to debit the capital account of the partner who had been credited in excess and credit the capital account of the partner who had been debited in excess.

## Self Assessment

Fill in the blanks:

1. If, interest on capital is one of the items of omissions, then first verify the partners' .................... at the beginning.
2. The omission may be in respect of $\qquad$ interest on drawings, interest on partners' loan, partner's salary, partner's commission or outstanding expenses.
3. All the acts of omission and commission need $\qquad$ for correction of their impact.
4. Sometimes a few omissions or errors in the recording of transactions or the preparation of ...................... are found after the final accounts have been prepared and the profits distributed among the partners.
5. The adjustment can also be made directly in the Partners' $\qquad$ without preparing a Profit and Loss Adjustment Account.

### 2.2 Appropriation of Profit \& Loss Account

The net profit as shown by the profit and loss account of a partnership firm needs certain adjustments with regard to interest on capitals, interest on drawings, salary, commission to the partners, if provided, under the agreement. For this purpose, 'Profit and Loss Appropriation Account' may be prepared. This is merely an extension of the profit and loss account and is prepared to show how net profit is to be distributed among the partners. This account is credited with net profit and interest on drawings, and debited with interest on capitals, salary or commission to partners. If, however, the profit and loss appropriation account shows a net loss, it will be shown on the debit side of the profit and loss appropriation account. After these adjustments have been made, the Profit and Loss Appropriation Account will show the amount of profit or loss, which shall be distributed among the partners in the agreed profit sharing ratio. For preparing the profit and loss appropriation account, the following journal entries have to be recorded for various items:

1. For Interest on Capital
(a) For Crediting Interest on Capital to Capital/Current Account:
Interest on Capital $\mathrm{A} / \mathrm{c}$
Dr.

To Partners' Capital/Current A/c
(b) For transferring Interest on Capital to Profit and Loss Appropriation Account:
Profit and Loss Appropriation A/c Dr.

To Interest on Capital A/c

## 2. For Interest on Drawings

(a) Interest on Drawings is a gain to the firm and is charged to Partner's Capital/ Current Account

```
Partners Capital/Current A/c

To Interest on Drawings A/c
(b) For transferring Interest on Drawings to Profit and Loss Appropriation Account, the following entry is to be recorded:
Interest on Drawings A/c Dr.

To Profit and Loss Appropriation A/c
3. Partner's Salary
(a) Salary allowed to a partner is a gain of the individual partner and charge against the profits of the firm as per partnership agreement. For this following entry is recorded:

Salary to Partner A/c
Dr.
To Partner Capital/Current A/c
(b) For charging salary allowed to a partner:

Profit and Loss Appropriation A/c Dr.

To Salary to Partner A/c
4. Partner's Commission
(a) Commission is an expense for the firm and a gain to the partner. For this, the following entry is made:
\[
\begin{array}{cc}
\text { Commission to Partner A/c } & \text { Dr. } \\
\text { To Partner's Capital/Current A/c } &
\end{array}
\]
(b) Commission paid to a partner is charged to Profit and Loss Appropriation account by recording the following entry:
\[
\begin{array}{cc}
\text { Profit and Loss Appropriation A/c } & \text { Dr. } \\
\text { To Commission to Partners A/c } &
\end{array}
\]
5. For Transfer to Reserve

Profit and Loss Appropriation A/c Dr.
To Reserve A/c
6. For Share of Profit or Loss on Appropriation

If Profit:
Profit and Loss Appropriation A/c Dr.
To Partner's Capital/Current A/c
If Loss:
Partner's Capital/Current A/c Dr.
To Profit and Loss Appropriation A/c
Figure 2.1 shows the proforma of profit and loss appropriation account.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Date & Particulars & J.F. & Amount (₹) & Date & Particulars & J.F. & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline & To Net Loss as per Profit and Loss A/c (if loss) & & ** & & By Net profit as per Profit and Loss A/c (if profit) & & \(\ldots\) \\
\hline & To Interest on Capital
\[
\begin{array}{ll}
\text { A } & x x \\
\text { B } & x x
\end{array}
\] & & ** & & By Interest on drawings & & xxx \\
\hline & \begin{tabular}{ll} 
To & Partner's \\
Salary &
\end{tabular} & & ....... & & By Capital A/cs Share of loss (if loss) & & \\
\hline & To Partner's Commission Reserve (transfer) & & \(\ldots\) & & & & \\
\hline & To Capital A/c Share of profit (if profit)
\[
\begin{array}{ll}
\text { A } & x x \\
\text { B } & x x
\end{array}
\] & & \(\ldots\) & & & & \\
\hline & & & ....... & & & & ...... \\
\hline
\end{tabular}

Example: Ajit, Choudhary and Vishal set up a partnership firm on January 1, 2001. They contributed ₹ 50,000 , ₹ 40,000 and ₹ 30,000 respectively as their capitals and decided to share profits in the ratio of \(3: 2: 1\). The partnership deed provided that Ajit is to be paid a salary of \(₹ 1,000 \mathrm{p} . \mathrm{m}\). and Choudhary a commission of ₹ 5,000 . It also provided that interest on capital be allowed @ \(6 \%\) p.a. The drawings for the year were: Ajit ₹ 6,000 , Choudhary ₹ 4,000 and Vishal ₹ 2,000 . Interest on drawings ₹ 270 on Ajit's drawings, ₹ 180 on Choudhary's drawings and ₹ 90 on Vishal's drawings. The net amount of profit as per the profit and loss account for the year ended 2001 was ₹ 35,660 .
You are required to record the necessary journal entries relating to appropriation of profit and prepare the profit and loss appropriation account and the partners' capital accounts.

\section*{Notes}

\section*{Solution:}

\section*{Books of Ajit, Chaudhary and Vishal Journal}
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
Date \\
2001
\end{tabular} & Particulars & L.F. & Debit Amount (₹) & \begin{tabular}{l}
Credit \\
Amount \\
(₹)
\end{tabular} \\
\hline \multirow[t]{10}{*}{End of the year} & \begin{tabular}{l}
Profit and Loss A/c \\
To Profit and Loss Appropriation A/c \\
(Transfer of Profit to Profit and Loss Appropriation Account)
\end{tabular} & & 35,660 & 35,660 \\
\hline & \begin{tabular}{|cc} 
Ajit's Salary A/c & Dr. \\
To Ajit's Capital A/c & \\
(Amount of Ajit's Salary) & \\
\hline
\end{tabular} & & 12,000 & 12,000 \\
\hline & \begin{tabular}{l}
Profit and Loss Appropriation A/c \\
To Ajit's Salary A/c \\
(Transfer of Ajit's Salary to Profit and Loss Appropriation Account)
\end{tabular} & & 12,000 & 12,000 \\
\hline & \begin{tabular}{|cc|}
\hline Choudhary's Commission A/c & Dr. \\
To Choudhary's Capital A/c & \\
(Amount of Choudhary's Commission) & \\
\hline
\end{tabular} & & 5,000 & 5,000 \\
\hline & \[
\begin{array}{|l}
\hline \text { Profit and Loss Appropriation A/c Dr. } \\
\quad \text { To Choudhary's Commission A/c } \\
\text { (Transfer of Choudhary's Commission to Profit } \\
\text { and Loss Appropriation Account) }
\end{array}
\] & & 5,000 & 5,000 \\
\hline & \begin{tabular}{l}
Interest on Capital \(\mathrm{A} / \mathrm{c}\) \\
To Ajit's Capital A/c \\
To Choudhary's Capital A/c \\
To Vishal's Capital A/c \\
(Amount of interest on capital)
\end{tabular} & & 7,200 & \[
\begin{aligned}
& 3,000 \\
& 2,400 \\
& 1,800
\end{aligned}
\] \\
\hline & \begin{tabular}{l}
Profit and Loss Appropriation A/c \\
To Interest on Capital A/c \\
(Transfer of Interest on Capital to Profit and Loss Appropriation Account)
\end{tabular} & & 7,200 & 7,200 \\
\hline & Ajit's Capital A/c Dr. & & 270 & \\
\hline & Choudhary's Capital A/c
Dr. & & 180 & \\
\hline & \begin{tabular}{l}
Vishal's Capital A/c \\
Dr. \\
To Interest on Drawings A/c \\
(Amount of interest on drawings)
\end{tabular} & & 90 & 540 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
Interest on Drawings A/c \\
To Profit and Loss Appropriation A/c \\
(Transfer of Interest on drawings to Profit and Loss Appropriation Account)
\end{tabular} & \[
540
\] & 540 \\
\hline \begin{tabular}{l}
Profit and Loss Appropriation A/c \\
To Ajit's Capital A/c \\
To Choudhary's Capital A/c \\
To Vishal's Capital A/c \\
(Amount of profit on appropriation)
\end{tabular} & 12,000 & \[
\begin{aligned}
& 6,000 \\
& 4,000 \\
& 2,000
\end{aligned}
\] \\
\hline
\end{tabular}

Notes

Profit and Loss Appropriation Account for the year ended December 31, 2001

Dr.
Cr.
\begin{tabular}{|l|c|l|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} \\
\hline To Ajit's Salary & 12,000 & \begin{tabular}{l} 
By Net profit as per profit and \\
loss account
\end{tabular} & 35,660 \\
\hline To Choudhary's Commission & 5,000 & Interest on Drawings: & 270 \\
\hline To Interest on Capital: & & Ajit's Capital & 180 \\
\hline Ajit's Capital & & \begin{tabular}{l} 
Choudhary's \\
capital
\end{tabular} & 90 \\
\hline \begin{tabular}{l} 
Choudhary's \\
Capital
\end{tabular} & 2,000 & & Vishal's Capital \\
\hline To Vishal's Capital & 1,800 & 7,200 & \\
\hline Capital Accounts: (Share of Profit) & & & 540 \\
\hline Ajit's Capital & 6,000 & & \\
\hline \begin{tabular}{l} 
Choudhary's \\
Capital
\end{tabular} & 4,000 & & \\
\hline Vishal's Capital & 2,000 & 12,000 & \\
\hline & \(\mathbf{3 6 , 2 0 0}\) & & \(\mathbf{3 6 , 2 0 0}\) \\
\hline
\end{tabular}

\section*{Notes}

\section*{Ajit's Capital Account}
Dr.
\begin{tabular}{|l|l|r|r|r|l|r|c|}
\hline \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & J.F. & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
J.F.
\end{tabular} & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} \\
\hline & To Drawings & & 6,000 & & By Cash & & 50,000 \\
\hline & \begin{tabular}{l} 
To Interest on \\
Drawings
\end{tabular} & & 270 & & By Salary & & 12,000 \\
\hline & To Balance c/f & & 64,730 & & By Interest on Capital & & 3,000 \\
\hline & & & & & \begin{tabular}{l} 
By Profit and Loss \\
Appropriation (Share \\
of profit)
\end{tabular} & & 6,000 \\
\hline & & & \(\mathbf{7 1 , 0 0 0}\) & & & & \(\mathbf{7 1 , 0 0 0}\) \\
\hline
\end{tabular}

Choudhary's Capital Account
Dr.
\begin{tabular}{|l|l|l|r|r|l|r|r|}
\hline \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & J.F. & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
J.F.
\end{tabular} & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline & To Drawings & & 4,000 & & By Cash & & 40,000 \\
\hline & \begin{tabular}{l} 
To Interest on \\
Drawings
\end{tabular} & & 180 & & By Salary & 5,000 \\
\hline & To Balance c/f & & \(47, \mathbf{2 2 0}\) & & By Interest on Capital & & \(\mathbf{2 , 4 0 0}\) \\
\hline & & & & \begin{tabular}{l} 
By Profit and Loss \\
Appropriation (Share \\
of profit)
\end{tabular} & & 4,000 \\
\hline & & & \(\mathbf{5 1 , 4 0 0}\) & & & & \(\mathbf{5 1 , 4 0 0}\) \\
\hline
\end{tabular}

Vishal's Capital Account
Dr. Cr.
\begin{tabular}{|l|l|r|r|l|l|r|r|}
\hline \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{r} 
J.F. \\
Amount \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Date \\
\(\mathbf{2 0 0 1}\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
J.F.
\end{tabular} & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} \\
\hline & To Drawings & & 2,000 & & By Cash & & 30,000 \\
\hline & \begin{tabular}{l} 
To Interest on \\
Drawings
\end{tabular} & & 90 & & By Interest on Capital & & 1,800 \\
\hline & To Balance c/f & & 31,710 & & \begin{tabular}{l} 
By Profit and Loss \\
Appropriation (Share of \\
profit)
\end{tabular} & & 2,000 \\
\hline & & & \(\mathbf{3 3 , 8 0 0}\) & & & & \(\mathbf{3 3 , 8 0 0}\) \\
\hline
\end{tabular}
\(R\) and \(S\) were partners in a firm sharing profits in the ratio of their capitals contributed on commencement of business which were ₹ 80,000 and ₹ 60,000 respectively The firm started business on April 1, 2005. According to the partnership agreement, interest on capital and drawings are \(12 \%\) and \(10 \%\) p.a., respectively. R and S are to get a monthly salary of ₹ 2,000 and ₹ 3,000 , respectively.

The profits for year ended March 31, 2006 before making above appropriations was ₹ \(1,00,300\). The drawings of \(R\) and S were ₹ 40,000 and ₹ 50,000 , respectively. Interest on drawings amounted to ₹ 2,000 for \(R\) and ₹ 2,500 for \(S\).

Prepare Profit and Loss Appropriation Account and partners' capital accounts, assuming that their capitals do vary.

Hint: Profit transferred to R's Capital ₹ 16,000 and S's Capital, ₹ 12,000 .

\section*{Self Assessment}
6. There are two methods by which the \(\qquad\) of partners can be maintained.
7. Under \(\qquad\) , two accounts are maintained for each partner viz., (i) Capital Account, and (ii) Current Account.
8. Profit and loss appropriation \(\mathrm{A} / \mathrm{c}\) is merely an extension of the \(\qquad\)
9. Profit and loss appropriation account is \(\qquad\) with net profit and interest on drawings.
10. Profit and loss appropriation account is \(\qquad\) with interest on capitals, salary or commission to partners.

\subsection*{2.3 Preparation of Adjusted Profit and Loss Account}

The following example illustrates the preparation of adjusted profit and loss account:

Example: Asha and Bony are partners in a firm sharing profits equally. Their capital accounts as on December 31, 2000 showed balances of ₹ 60,000 and ₹ 50,000 respectively. After taking into account the profits of the year 2000, which amounted to ₹ 20,000 , it was subsequently found that the following items have been left out while preparing the final account of the year ended 2000.
1. The partners were entitled to interest on capitals @ \(6 \%\) p.a.
2. The drawings of Asha and Bony for the year 2000 were ₹ 8,000 and \(₹ 6,000\), respectively. The interest on drawings was also to be charged @ \(5 \%\) p.a.
3. Asha was entitled to salary of ₹ 5,000 and Bony, a commission of ₹ 2,000 for the whole year. It was decided to make the necessary adjustments to record the above omissions. Give the necessary journal entries and prepare the profit and loss adjustment account and Partners' capital accounts.

\section*{Notes}

\section*{Solution:}
1. Partners capital at the beginning
\begin{tabular}{|l|r|r|}
\hline & Asha (₹) & Bony (₹) \\
\hline Capital at the end & 60,000 & 50,000 \\
\hline Less: Share of Profit (₹ 20,000 shared equally) & \((10,000)\) & \((10,000)\) \\
\hline & \(\mathbf{5 0 , 0 0 0}\) & \(\mathbf{4 0 , 0 0 0}\) \\
\hline Add: Drawings & 8,000 & 6,000 \\
\hline Capital at the beginning & \(\mathbf{5 8 , 0 0 0}\) & \(\mathbf{4 6 , 0 0 0}\) \\
\hline
\end{tabular}
2. Interest on Capital

For Asha: \(58,000 \times 6 / 100=₹ 3,480\)
For Bony: \(46,000 \times 6 / 100=₹ 2,760\)
3. Interest on Drawings

For Asha: on ₹ 8,000 @ \(5 \%\) p.a. for 6 months.
\[
8,000 \times \frac{5}{100} \times \frac{6}{12}=₹ 200
\]

For Bony: on ₹ 6,000 @ \(5 \%\) p.a. for 6 months
\[
6,000 \times \frac{5}{100} \times \frac{6}{12}=₹ 150
\]

\section*{Books of Asha and Bony Journal}


Profit and Loss Adjustment Account for the year ended December 31, 2000
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} & Particulars & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} \\
\hline To Capital (Interest on capital) & & By Capital (Interest on Drawings) & \\
\hline Asha 3,480 & & Asha & 200 \\
\hline Bony & 2,760 & 6,240 & Bony \\
\hline To Asha's capital (Salary) & 5,000 & By Capital (Loss on adjustments) & 350 \\
\hline To Bony's capital (Commission) & 2,000 & Asha & \\
\hline & & Bony & 6,445 \\
\hline & \(\mathbf{1 3 , 2 4 0}\) & & 12,890 \\
\hline
\end{tabular}

Partners' Capital Account
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Date } \\
& 2000
\end{aligned}
\] & Particulars & J.F. & \begin{tabular}{l}
Asha's \\
(₹)
\end{tabular} & \begin{tabular}{l}
Bony's \\
(₹)
\end{tabular} & \[
\begin{aligned}
& \text { Date } \\
& 2000
\end{aligned}
\] & Particulars & J.F. & \begin{tabular}{l}
Asha's \\
(₹)
\end{tabular} & \begin{tabular}{l}
Bony's \\
(₹)
\end{tabular} \\
\hline \multirow[t]{6}{*}{\[
\begin{aligned}
& \mathrm{Dec} \\
& 31
\end{aligned}
\]} & \multirow[t]{2}{*}{\begin{tabular}{l}
Profit and Loss \\
Adjustment: (interest on drawings)
\end{tabular}} & \multirow[t]{2}{*}{} & \multirow[b]{2}{*}{200} & \multirow[b]{2}{*}{150} & \multirow[t]{2}{*}{Dec 31} & Balance b/f & & 60,000 & 50,000 \\
\hline & & & & & & \begin{tabular}{l}
Profit and Loss \\
Adjustment: (Interest on capital)
\end{tabular} & & 3,480 & 2,760 \\
\hline & \begin{tabular}{l}
Profit and Loss \\
Adjustment: \\
(Loss on \\
Adjustment)
\end{tabular} & & 6,445 & 6,445 & & Profit and Loss Adjustment: (Salary) & & 5,000 & \\
\hline & Balance c/f & & 61,835 & 48,165 & & \begin{tabular}{l}
Profit and Loss \\
Adjustment: \\
(Commission)
\end{tabular} & & & 2,000 \\
\hline & & & 68,480 & 54,760 & & & & 68,480 & 54,760 \\
\hline & & & & & & Balance b/f & & 61,835 & 48,165 \\
\hline
\end{tabular}

For a single adjustment entry an analysis table to find out the amount to be debited or credited to the capital accounts of the partners individually.
\begin{tabular}{|l|r|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{ Asha (₹) } & \multicolumn{1}{c|}{ Bony (₹) } \\
\hline Amount credited (Interest on capital, salary and commission) & 8,480 & 4,760 \\
\hline Amount debited (Interest on drawings and share of loss) & 6,645 & 6,595 \\
\hline & Cr. 1,835 & Dr. 1,835 \\
\hline
\end{tabular}

Notes
\begin{tabular}{|cc|l|l|}
\hline \begin{tabular}{c} 
Bony's Capital A/c \\
Asha's Capital A/c
\end{tabular} & Dr. & 1,835 & \\
\hline
\end{tabular}

Alternatively: A detailed statement can be prepared as follows:
\begin{tabular}{|l|c|c|c|c|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{3}{|c|}{ Amount already recorded } & \multicolumn{2}{|c|}{\begin{tabular}{c} 
Amount as should \\
have been recorded
\end{tabular}} \\
Adjustment \\
\hline & Dr. (₹) & Cr. (₹) & Dr. (₹) & Cr. (₹) & Dr./Cr. (₹) \\
\hline Asha's Capital: & - & - & - & & \\
Interest on Capital & - & - & & 3,480 & \\
Interest on Drawings & - & & 200 & & \\
Salary & - & & - & 5,000 & \\
Share of Profit & & 10,000 & & 3,555 & \\
\hline Net & & \(\mathbf{1 0 , 0 0 0}\) & - & \(\mathbf{1 1 , 8 3 5}\) & Cr. 1,835 \\
\hline Bony's Capital: & & - & - & 2,760 & \\
Interest on Capital & - & - & 150 & - & \\
Interest on Drawings & - & 10,000 & - & 3,555 & \\
Commission & & & 150 & 8,315 & \\
Share of Profit & - & \(\mathbf{1 0 , 0 0 0}\) & - & \(\mathbf{8 , 1 6 5}\) & Dr. 1,835 \\
\hline
\end{tabular}

Note: Share of Profit has been worked out as under:
Profit and Loss Appropriation Account
for the year ended December 31, 2000
Dr.
Cr .
\begin{tabular}{|lc|c|c|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
\((\boldsymbol{₹})\)
\end{tabular} & \multicolumn{1}{c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline To Interest on Capital & & By Profit as per Profit and Loss A/c & 20,000 \\
\hline Asha & 3,480 & & By Interest on Drawings: & \\
\hline Bony & 2,760 & 6,240 & Asha's & 200 \\
\hline To Asha's Capital (Salary) & 5,000 & Bony's & \\
\hline To Bony's Capital (Commission) & 2,000 & & 350 \\
\hline To Share of Profit: & & & \\
\hline Asha & 3,555 & & & \\
\hline Bony & 3,555 & 7,110 & & \(\mathbf{2 0 , 3 5 0}\) \\
\hline
\end{tabular}

\subsection*{2.4 Summary}
- Sometimes a few omissions or errors in the recording of transactions or the preparation of summary statements are found after the final accounts have been prepared and the profits distributed among the partners.
- There may also be some changes in the provisions of partnership deed or system of accounting having impact with retrospective effect.
- All these acts of omission and commission need adjustments for correction of their impact.
- The adjustment can also be made directly in the Partners' Capital Accounts without preparing a Profit and Loss Adjustment Account.
- The distribution of profits among the partners is shown through a Profit and Loss Appropriation Account, which is merely an extension of the Profit and Loss Account.
- This account is credited with net profit and interest on drawings, and debited with interest on capitals, salary or commission to partners.
- After these adjustments have been made, the Profit and Loss Appropriation Account will show the amount of profit or loss, which shall be distributed among the partners in the agreed profit sharing ratio.

\subsection*{2.5 Keywords}

Capital: The contribution made by the partner's in a business is called capital.
Partnership Deed: Partnership deed is the written agreement among the partners.
Profit and Loss Appropriation Account: All adjustments such as partner's salary, partner's commission, interest on capital, interest on drawings, etc. are made through this account.

\subsection*{2.6 Review Questions}
1. Why the Profit and Loss Appropriation Account is prepared?
2. Neeraj and Amit started business with capital of 1,00,000 each on January 1, 2006. Their drawings during the year were ₹ 1,000 and ₹ 500 per month respectively. The interest on drawing was ₹ 200 and ₹ 100 respectively. They are allowed interest on capital at \(8 \%\) p.a. Neeraj is allowed a salary of ₹ 2,000 per month. They earned a profit of ₹ 94,000 before interest and salary. They share profit is the ratio of \(2: 1\).

Prepare Profit and Loss Appropriation Account.
3. \(R\) and \(B\) were partners in a firm and their balances on March 1, 2006 are as under:
\begin{tabular}{|l|c|c|}
\hline & \begin{tabular}{c} 
R \\
\((₹)\)
\end{tabular} & \begin{tabular}{c} 
B \\
\((₹)\)
\end{tabular} \\
\hline Capital accounts & 90,000 & \(1,20,000\) \\
Current account & \(8,000(\mathrm{Cr})\) & 4,000 (Dr.) \\
Drawings & 5,000 & 6,000 \\
\hline
\end{tabular}

Notes
Net profit before charging interest on capital and partners salary was ₹ 25,600 . They agree on the following:
(i) Profit and losses to be shared equally.
(ii) \(6 \%\) interest is to be allowed on capital.
(iii) B will be paid a monthly salary ₹ 9,000

Prepare Profit and Loss Appropriation Account and partners capital accounts.
4. The partnership agreement of Mohit and Raj provides that:
(i) Profit will be shared is the ratio of \(3: 2\).
(ii) Mohit will be allowed a salary of ₹ \(500 \mathrm{p} . \mathrm{m}\).
(iii) \(8 \%\) interest will be allowed on partner's fixed capital accounts.
(iv) \(6 \%\) interest to be charged on partners drawings.
(v) The fixed capital of Mohit and Raj is ₹ \(2,00,000\) and ₹ \(1,50,000\), respectively. Their drawings were ₹ 10,000 and ₹ 12,000 respectively. The net profit for the year ending December 2006 amounted to ₹ 62,000 .

Prepare Profit and Loss Appropriation Account.
5. Pass the necessary entries for preparing adjusted profit and loss account.
6. Prepare the proforma of profit and loss adjustment account with explanation.
7. Pass the necessary entries for preparing profit and loss appropriation account.
8. Construct the proforma of profit and loss appropriation account.
9. List the items which usually appear on the debit side of Profit and loss appropriation account.
10. If, balance of profit and loss account is debit, what entry to be recorded for transferring the amount to Profit and Loss Appropriation account?

\section*{Answers: Self Assessment}
1. Capital
3. Adjustments
5. Capital Accounts
7. Fixed capital method
9. Credited
2. Interest on capitals
4. Summary statements
6. Capital accounts
8. Profit and loss account
10. Debited

\subsection*{2.7 Further Readings}

Notes

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V.K. Goyal, Financial Accounting, Excel Books, New Delhi.

Online link www.futureaccountant.com
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\section*{Objectives}

After studying this unit, you will be able to:
- Make adjustments regarding profit sharing ratio
- Prepare accounts for treatment of goodwill
- Construct adjustments regarding the revaluation of assets \& liabilities

\section*{Introduction}

When a business enterprise requires additional capital or managerial help or both for expansion of the business it may admit a new partner to enhance its existing resources. In case of a sole proprietorship, it is converted into a partnership on the admission of a new person as an owner of the business enterprise. According to the Partnership Act, 1932, no new partner can be introduced into a firm without the consent of all the existing partners. On admission of a new partner, the partnership firm is reconstituted with a new agreement. For example, Amit and Sumit are partners sharing profit in the ratio of \(5: 3\). On April 1, 2009 they admitted Neha as a new partner with \(1 / 4\) th share in the profit of the firm. In this case, with the admission of Neha as partner, the firm stands reconstituted.

Notes A newly admitted partner acquires two main rights in the firm:
1. Right to share in the assets of the partnership firm
2. Right to share in the profit of the partnership firm.

\subsection*{3.1 Adjustment Regarding Profit Sharing Ratios}

The new partner acquires his share in profits from the old partners. It means, on the admission of a new partner, the old partners sacrifice a share of their profit in favour of the new partner. As a result, the profit sharing ratio in the new firm is decided mutually between the existing partners and the new partner. The incoming partner acquires his/her share of future profits either incoming from one or more existing partner.

Example: A and B are two partners sharing their profit in the ration of \(4: 3\). The admitted \(C\) as a partner for \(1 / 7\) share in profit. Calculate the new profit sharing ratios of all the partners.

\section*{Solution:}

Let total Profit = 1
New partner's share \(=1 / 7\)
Remaining share \(=1-1 / 7=6 / 7\)
A's new share \(=4 / 7\) of \(6 / 7=24 / 49\)
B's new share \(=3 / 7\) of \(6 / 7=18 / 49\)
\(C^{\prime}\) s Share \(=1 / 7\)
The new profit sharing ratio of \(A, B\) and \(C\) is:
\[
\begin{aligned}
& =24 / 49: 18 / 49: 1 / 7 \\
& =24 / 49: 18 / 49: 7 / 49 \\
& =24: 18: 7
\end{aligned}
\]

\section*{Sacrificing Ratio}

The ratio in which the old partners agree to sacrifice their share of profit in favour of the incoming partner is called sacrificing ratio. Some amount is paid to the existing partners for their sacrifice. The amount of compensation is paid by the new partner to the existing partner for acquiring the share of profit which they have surrendered in the favour of the new partner.

Notes Following cases may arise for the calculation of new profit sharing ratio and sacrificing ratio:
Case 1: Only the new partner's share is given.
In this case, it is presumed that the existing partners continue to share the remaining profit in the same ratio in which they were sharing before the admission of the new partner. Then, existing partner's new ratio is calculated by dividing remaining share of the profit in their existing ratio. Sacrificing ratio is calculated by deducting new ratio from the existing ratio.

Example: Rohit and Mohit are partners sharing profit in the ratio of \(3: 2\). They admit Sumit as a new partner for \(1 / 5\) share in profit. Calculate the new profit sharing ratio and sacrificing ratio.

\section*{Solution:}

Calculation of new profit sharing ratio:
Let total Profit \(=1\)
New partner's share \(=1 / 5\)
Remaining share \(=1-1 / 5=4 / 5\)
Rohit's new share \(=3 / 5\) of \(4 / 5=12 / 25\)
Mohit's new share \(=2 / 5\) of \(4 / 5=8 / 25\)
Sumit's Share \(=1 / 5\)
The new profit sharing ratio of Rohit, Mohit and Sumit is:
\[
\begin{aligned}
& =12 / 25: 8 / 25: 1 / 5 \\
& =12 / 25: 8 / 25: 5 / 25 \\
& =12: 8: 5
\end{aligned}
\]

\section*{Calculation of Sacrificing Ratios}
\begin{tabular}{ll} 
Rohit Sacrificed & \(=3 / 5-12 / 25=15-12 / 25=3 / 25\) \\
Mohit Sacrificed & \(=2 / 5-8 / 25=10-8 / 25=2 / 25\) \\
Sacrificing Ratio & \(=3: 2\)
\end{tabular}

Sacrificing ratio of the existing partners is same as their existing ratio.
Case 2: When new partner acquired his/her share of the profit from the existing partner in a particular ratio.
It means the incoming partner has purchased some share of profit in a particular ratio from the existing partners.

Example: Neha and Parteek are partners, sharing profit in the ratio of \(3: 2\). They admit Nisha as a new partner for \(3 / 10\) share in profit. She acquires this share as \(2 / 10\) from Neha and \(1 / 10\) share from Parteek. Calculate the new profit sharing ratio and sacrificing ratio.

\section*{Solution:}

Neha's and Parteek existing ratio is \(3: 2\)
Neha's new share \(=3 / 5-2 / 10=4 / 10\)
Parteek's new share \(=2 / 5-1 / 10=3 / 10\)

Nisha's share \(=3 / 10\)
The new profit sharing ratio of Neha, Parteek and Nisha is
\[
\begin{aligned}
& =4 / 10: 3 / 10: 3 / 10 \\
& =4: 3: 3
\end{aligned}
\]

Case 3: Existing partners surrender a particular portion of their share in favour of a new partner.

In this case, sacrificed share of the each partner is ascertained by multiplying the existing partner share in the ratio of their sacrifice. The share sacrificed by the existing partners should be deducted from his existing share. Therefore, the new share of the existing partners is determined. The share of the incoming partner is the sum of sacrifice by the existing partners.


Example: Him and Raj shared profits in the ratio of \(3: 2\). Jolly was admitted as a partner. Him surrendered \(1 / 4^{\text {th }}\) of his share and Raj \(1 / 3^{\text {rd }}\) of his share in favour of Jolly. Calculate the new profit sharing ratio.

\section*{Solution:}
\begin{tabular}{ll} 
Him's Old Share & \(=3 / 5\) \\
Share surrendered by Him & \(=1 / 4\) \\
Him's sacrifice & \(=1 / 4\) of \(3 / 5=3 / 20\) \\
Him's new share & \(=3 / 5-3 / 20=9 / 20\) \\
Raj's old share & \(=2 / 5\) \\
Share surrendered by Raj & \(=1 / 3\) \\
Raj's sacrifice & \(=1 / 3\) of \(2 / 5=2 / 15\) \\
Raj's new share & \(=2 / 5-2 / 15=4 / 15\) \\
Jolly's share & \(=H i m ' s ~ s a c r i f i c e ~\)
\end{tabular} Raj's sacrifice

Therefore, the new profit sharing ratio of Him, Raj and Jolly will be \(27: 16: 17\)

\section*{Self Assessment}

Fill in the blanks:
1. According to the Partnership Act, 1932, no new partner can be introduced into a firm without the \(\qquad\) of all the existing partners.
2. The new partner acquires his share in profits from the \(\qquad\)
3. The ratio in which the old partners agree to sacrifice their share of profit in favour of the incoming partner is called \(\qquad\) ....
4. \(\quad\) Sacrificing Ratio \(=\) \(\qquad\) - New Ratio
5. The share sacrificed by the existing partners should be deducted from his \(\qquad\) share.

\section*{Notes \\ 3.2 Treatment of Goodwill}

The term goodwill means the value of the reputation of a firm in respect of the profit earned in future over and above the normal profit. Goodwill is the result of the efforts made by the existing partners in the past. Therefore, on the eve of the admission, the new partner who is going to acquire the right to share future profits must compensate the existing partners by making payment to them. This amount is called the share of goodwill.


As per Accounting Standard 10(AS-10) that goodwill should be recorded in the books only when some consideration in money has been paid for it. Thus, if a new partner does not bring necessary cash for goodwill, no goodwill account can be raised in the books. He/she should pay for goodwill in addition to his/her contribution for capital.

From accounting point of view, there may be different situations related to treatment of goodwill which are discussed here:
- When the amount of goodwill is paid privately by the new partner.
- When the new partner brings his/her share of goodwill in cash.
- When the new partner does not bring his/her share of goodwill in cash.

\subsection*{3.2.1 Methods of Calculating Goodwill}

The following are the key methods of calculating goodwill:

\section*{1. Average Profit Method}
2. Super Profit Method
3. Capitalisation Method

\section*{Average Profit Method}

Under this method, the goodwill is valued at agreed number of 'years' purchase of the average profits of the past few years. It is based on the assumption that a new business will not be able to earn any profits during the first few years of its operations. Hence, the person who purchases a running business must pay in the form of goodwill a sum which is equal to the profits he is likely to receive for the first few years. The goodwill is calculated as follows:

Value of goodwill \(=\) Average Profit \(\times\) Number of year of purchase


Example: The profit for the last five years of a firm were as follows year 1999 ₹ 5,00,000; year 2000 ₹ \(4,45,000\); year 2001 ₹ \(4,50,000\); year 2002 ₹ \(3,98,000\) and year 2003 ₹ \(4,00,000\). Calculate goodwill of the firm on the basis of 4 years purchase of 5 years average profits.

\section*{Solution:}
\begin{tabular}{ll} 
Years & Profit \\
& \((₹)\) \\
1999 & \(5,00,000\) \\
2000 & \(4,45,000\) \\
2001 & \(4,50,000\)
\end{tabular}
2002
2003
Total
Total Profit/No. of years
\(2,19,3000 / 5=₹ 4,38,600\)
verage Profit \(\times\) No. of years Purchased
\(4,38,600 \times 4=₹ 17,54,400\)

3,98,000
Notes
4,00,000
21,93,000
Average Profit \(=\) Total Profit/No. of years
\[
\begin{aligned}
& =₹ 2,19,3000 / 5=₹ 4,38,600 \\
\text { Goodwill } & =\text { Average Profit } \times \text { No. of years Purchased } \\
& =₹ 4,38,600 \times 4=₹ 17,54,400
\end{aligned}
\]

\section*{Super Profit Method}

The goodwill under the super profits method is ascertained by multiplying the super profits by certain number of years' purchase. The steps involved under the method are:
1. Calculate the average profit,
2. Calculate the normal profit on the capital employed on the basis of the normal rate of return,
3. Calculate the super profits by deducting normal profit from the average profits, and
4. Calculate goodwill by multiplying the super profits by the given number of years' purchase.

Normal profit \(=\frac{\text { Capital employed } \times \text { Normal rate of return }}{100}\)
Super Profit \(=\) Actual Profit - Normal Profit

䍚
Example: A firm earns profit of ₹ 65,000 on a capital of ₹ \(4,80,000\) and the normal rate of return in similar business is \(10 \%\). Then the normal profit is ₹ 48,000 [ \(10 \%\) of the \(₹ 4,80,000\) ]. The actual profit is ₹ 65,000 .

\section*{Solution:}

Super profit \(=\) Actual profit - Normal profit
\(=₹ 65,000-₹ 48,000\)
= ₹ 17,000
If value of Goodwill is calculated by 3 years' purchase of super profit then goodwill is equal to:
\(=₹ 17000 \times 3\) = ₹ 51,000
EF
Example: The profits by a business for the last five years were: 1997-₹ 40,000; 1998 - ₹ 50,\(000 ; 1999\) - ₹ 55,\(000 ; 2000\) - ₹ 70,000 and 2001 - ₹ 85,000 . The books of business showed that the capital employed on December 31, 2001, is ₹ \(5,00,000\). You are required to find out the value of goodwill based on 3 years purchase of the super profits of the business, given that the normal rate of return is \(10 \%\).

\section*{Solution:}

Normal profit \(=\frac{\text { Capital employed } \times \text { Normal rate of return }}{100}\)

Notes
\[
\begin{aligned}
& =₹ 5,00,000 \times \frac{10}{100} \\
& =₹ 50,000 \\
\text { Total Profit } & =₹ 40,000+₹ 50,000+₹ 55,000+₹ 70,000+₹ 85,000=₹ 3,00,000 \\
\text { Average Profit } & =₹ 3,00,000 / 5 \\
& =₹ 60,000 \\
\text { Super Profit } & =\text { Actual Profit }- \text { Normal Profit } \\
& =₹ 60,000-₹ 50,000=₹ 10,000 \\
\text { Goodwill } & =₹ 10,000 \times 3=₹ 30,000
\end{aligned}
\]

\section*{Capitalization Method}

Under this method the goodwill can be calculated in two ways:
(a) By capitalising the average profits
(b) By capitalising the super profits
(a) Capitalisation of Average profit: In this method, the value of goodwill is assumed to be excess of the capital value of average profit over the actual capital employed. The key steps involved in this method are as follows:
1. Computation of average profit
\[
\text { Average Profits } \times 100 / \text { Normal Rate of Return }
\]
2. Computation of capital employed

Capital Employed \(=\) Total Assets (excluding goodwill) - outside liabilities
3. Computation of goodwill

Goodwill \(=\) Capitalised value of profits - Capital employed

EExample: A business has earned average profits of ₹ 40,000 during the last few years and the normal rate of return in a similar type of business is \(10 \%\). Ascertain the value of goodwill by capitalization method, given that the value of net assets of the business is ₹ \(3,10,000\).

\section*{Solution:}

Capital Employed \(=₹ 3,10,000\)
Capitalised value of average profit \(=\) Average Profit \(\times 100 /\) Normal rate of profit
\[
\begin{aligned}
& =₹ 40,000 \times 100 / 10 \\
& =₹ 4,00,000
\end{aligned}
\]

Goodwill \(=\) Capitalised value - Capital employed
= ₹ 4,00,000 - ₹ 3,10,000
= ₹ 90,000
(b) Capitalisation of Super profit: In this method, the value of goodwill is calculated on the basis of super profit method. Following formula is applied for Calculation of capital employed:


Example: A firm earns a profit of ₹ 25,000 and has invested capital amounting to \(₹ 2,20,000\). In the same business normal rate of earning profit is \(15 \%\). Calculate the value of goodwill with the help of Capitalisation of super profit method.

\section*{Solution:}
\begin{tabular}{rl} 
Actual profit & \(=₹ 25,000\) \\
Normal profit & \(=₹ 2,20,000 \times 10 / 100=₹ 22,000\) \\
Super Profit & \(=\) Actual Profit - Normal Profit \\
& \(=₹ 25,000-₹ 22,000\) \\
& \(=₹ 3,000\) \\
Goodwill & \(=\) Super profit \(\times 100 /\) normal rate of profit \\
& \(=₹ 3,000 \times 100 / 15\) \\
& \(=₹ 20,000\)
\end{tabular}

\subsection*{3.2.2 Goodwill (Premium) Paid Privately}

If the goodwill premium is paid privately by the new partner to the old partners outside the business then the same is not recorded in the books of accounts and hence no journal entry is recorded.

\subsection*{3.2.3 Goodwill/Premium brought in Cash by the New Partner and retained in the Business}

When, the new partner brings his/her share of goodwill in cash, the amount brought in by the new partner is transferred to the existing partner in the sacrificing ratio. If there is any goodwill account in the balance sheet of existing partner, it will be written off immediately in existing ratio among the partners. The journal entries are as follows:
1. For bringing premium (share of goodwill)
Cash/Bank A/c Dr

To Goodwill A/c
2. For transferring goodwill to the capital accounts of the old partners in their sacrificing ratio.

Goodwill A/c
Dr
To Sacrificing Partner's Capital A/c (Individually)
However, instead of these two entries one can record only one entry given below:

> Cash/Bank A/c Dr

To Sacrificing Partner's Capital A/c (Individually)

Example: Tanaya and Sumit are partners in a firm sharing profit in the ratio \(5: 3\). They admitted Gauri as a new partner for \(1 / 5^{\text {th }}\) share in the profit. Gauri brings ₹ 20,000 for her share of goodwill. Make journal entries in the books of the firm after the admission of Gauri. The new profit sharing ratio will be \(3: 1: 1\).
Solution:
Books of Tanaya, Sumit and Gauri
\begin{tabular}{|l|l|l|l|l|}
\hline Date & Particulars & \begin{tabular}{c} 
L.F.
\end{tabular} & \begin{tabular}{c} 
Debit Amount \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Credit \\
Amount \\
(₹)
\end{tabular} \\
\hline & \begin{tabular}{l} 
Bank A/c \\
To Goodwill A/c \\
(Cash brought by Gauri for her share \\
of goodwill)
\end{tabular} & & 20,000 & 20,000 \\
\cline { 2 - 3 } \begin{tabular}{l} 
Goodwill A/c \\
\begin{tabular}{l} 
To Tanaya's A/c \\
To Sumit's A/c \\
(Goodwill brought by Gauri \\
transferred to the capital accounts of \\
Tanaya and Sumit in their sacrificing \\
ratio)
\end{tabular} \\
\hline
\end{tabular} & 20,000 & 2,500 \\
\hline
\end{tabular}

Working Notes:
\[
\begin{array}{ll}
\text { Tanaya's old share } & =\frac{5}{8} \\
\text { Tanaya's new share } & =\frac{3}{5} \\
\text { Tanaya's sacrificing ratio } & =\frac{5}{8}-\frac{3}{5}=\frac{1}{40} \\
\text { Sumit's old share } & =\frac{3}{8} \\
\text { Sumit's new share } & =\frac{1}{5} \\
\text { Sumit's sacrificing ratio } & =\frac{3}{8}-\frac{1}{5}=\frac{7}{40}
\end{array}
\]
\(\therefore \quad\) Sacrificing ration will be \(1: 7\)

\subsection*{3.2.4 When the new Partner does not bring his/her share of Goodwill in Cash}

Sometimes the new partner is not able to bring goodwill in cash. In this case, the amount of goodwill existing in the books is written off by debiting the capital account of existing partners in their existing profit sharing ratio.

Example: A and B are partners sharing profit in the ratio of \(2: 3\). They agree to admit C for \(1 / 5\) share in future profit. C brings ₹ \(2,50,000\) as capital and enable to bring her share of goodwill in cash, the goodwill of the firm to be valued at ₹ \(1,80,000\). At the time of admission goodwill existed in the books of the firm at ₹ 80,000 . Make necessary journal entries in the books of the firm.

\section*{Solution:}

Books of A, B and C


\section*{Working Note:}
\(A\) and \(B\) sacrifice their profit in favour of \(C\) in their existing profit sharing ratio i.e. \(2: 3\). Therefore, the sacrificing ratio is \(2: 3\).
Value of Goodwill = ₹ \(1,80,000\)
\(C^{\prime}\) 's share in Profit \(=1 / 5\)
C's share of Goodwill = ₹ \(1,80,000 \times 1 / 5=₹ 36,000\)


Anshu and Anup are partners in a firm sharing profits in the ratio of 5:3. On Jan. 1, 2003 they admit Shilpi as a new partner. The new profit sharing ratio will be \(4: 3: 2\). Shilpi brought ₹ \(1,00,000\) for her capital but could not bring any share of goodwill. The firm's goodwill on Shilpi's admission was valued at ₹ \(1,80,000\). At the time of Shilpi's admission goodwill existed in the books of the firm at ₹ \(2,40,000\). Record necessary journal entries on Shilpi's admission.

\section*{Notes \\ Self Assessment}

State whether the following statements are true or false:
6. The term goodwill means the value of the reputation of a firm in respect of the profit earned in future over and above the normal profit.
7. Goodwill has no relation with the efforts made by the existing partners in the past.
8. When, the new partner brings his/her share of goodwill in cash, the amount brought in by the new partner is transferred to the existing partner in the sacrificing ratio.
9. If there is any goodwill account in the balance sheet of existing partner, it will be written off immediately in new ratio among the partners.
10. If a new partner does not bring necessary cash for goodwill, no goodwill account can be raised in the books.

\subsection*{3.3 Adjustment Regarding Revaluation of Assets and Liabilities}

At the time of admission of a new partner, it is always desirable to ascertain whether the assets of the firm are shown in books at their current values. In case the assets are overstated or understated, these are revalued. Similarly, a reassessment of the liabilities is also done so that these are brought in the books at their correct values. At times there may be some unrecorded assets with the business, these are also recorded and similarly if there is any unrecorded liability which the firm has to pay, the same is also recorded. For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called Revaluation Account. Any gain or loss on revaluation of assets and reassessment of liabilities is transferred to the capital accounts of the old partners in their old profit sharing ratio. The revaluation account is credited with increase in the value of assets and decrease in the value of liabilities because it is a gain. Similarly, decrease of assets and increase in the value of liabilities is debited to revaluation account because it is a loss. Unrecorded assets are credited and unrecorded liabilities are debited in the revaluation account. If the revaluation account shows a credit balance then it indicates gain and if there is a debit balance then it indicates loss. Gain on revaluation or loss on revaluation will be transferred to the capital accounts of the old partners in old ratio.

The following journal entries are recorded on revaluation of assets and reassessment of liabilities.
(i) For increase in the value of Assets

> Asset A/c
> To Revaluation A/c
> (Increase in the value of Assets)

Dr.
(ii) For decrease in the value of Asset

Revaluation \(\mathrm{A} / \mathrm{c}\)
To Asset A/c
(Decrease in the value of Assets)
(iii) For increase in the value of Liabilities

Revaluation A/c
Dr.
To Liabilities A/c
(Increase in the value of Liabilities)
(iv) For decrease in the value of Liabilities

Liabilities A/c
Dr.
To Revaluation A/c
(Decrease in the value of Liabilities)
(v) For unrecorded Assets

Asset A/c [unrecorded]
Dr.
To Revaluation A/c
(Unrecorded asset recorded at actual value)
(vi) For unrecorded Liability

Revaluation A/c
Dr.
To Liability A/c [unrecorded]
(Unrecorded Liability recorded at actual value)
(vii) For transfer of gain on revaluation

Revaluation A/c
Dr.
To Existing Partner's Capital/Current A/c
(Profit on revaluation transferred to capital account in existing ratio)
(viii) For transfer of loss on revaluation

Existing Partner's Capital/Current A/c
Dr.
To Revaluation A/c
(Loss on revaluation transferred to capital account in existing ratio)
 business as on March 31, 2003. A and B share profits in the ratio of \(2: 1\)

Balance Sheet of A and B as at March 31, 2003
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{\begin{tabular}{l} 
Liabilities \\
\end{tabular}} & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & \multicolumn{1}{c|}{ Assets } & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Bills Payable & 10,000 & Cash in Hand & 10,000 \\
Sundry creditors & 58,000 & Cash at Bank & 40,000 \\
Outstanding expenses & 2,000 & Sundry Debtors & 60,000 \\
Capital Accounts: & & Stock on Hand & 40,000 \\
A 1,80,000 & & Plant and Machinery & \(1,00,000\) \\
B \(\quad 1.50,000\) & \(3,30,000\) & Building & \(1,50,000\) \\
\hline Total & \(\mathbf{4 , 0 0 , 0 0 0}\) & Total & \(\mathbf{4 , 0 0 , 0 0 0}\) \\
\hline
\end{tabular}

C is admitted as a partner on the date of the balance sheet on the following terms:
1. C will bring in ₹ \(1,00,000\) as his capital and ₹ 60,000 as his share of goodwill for \(1 / 4\) th share in profits.
2. Plant is to be appreciated to ₹ \(1,20,000\) and the value of buildings is to be appreciated by \(10 \%\).
3. Stock is found overvalued by ₹ 4,000 .
4. A provision for bad and doubtful debts is to be created at \(5 \%\) of debtors.
5. Creditors were unrecorded to the extent of \(₹ 1,000\).

Record the necessary journal entries and prepare the revaluation account.

\section*{Solution:}

\section*{Books of A, B and C \\ Journal}

\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{lr} 
Plant and Machinery A/c & Dr. \\
Buildings A/c & Dr. \\
\(\quad\) To Revaluation A/c & \\
(Increase in the value of assets on revaluation)
\end{tabular} & \[
\begin{aligned}
& 20,000 \\
& 15,000
\end{aligned}
\] & 35,000 \\
\hline \begin{tabular}{l}
Revaluation A/c \\
Dr. \\
To A's Capital A/c \\
To B's Capital A/c \\
(Transfer of gain on revaluation to old partners' capital accounts)
\end{tabular} & 27,000 & \[
\begin{array}{r}
18,000 \\
9,000
\end{array}
\] \\
\hline
\end{tabular}

Revaluation Account
\begin{tabular}{|l|r|l|c|}
\hline Particulars & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & Particulars & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Stock on hand & 4,000 & Plant and Machinery & 20,000 \\
Provision for Bad and & 3,000 & \begin{tabular}{l} 
Building \\
Doubtful Debts. \\
Creditors
\end{tabular} & 1,000 \\
Profits on Revaluation & & & \\
\begin{tabular}{l} 
transferred to capitals of - \\
A
\end{tabular} & & & \\
B & \(\underline{9,000}\) & 27,000 & \\
\hline \multicolumn{1}{|c|}{ Total } & \(\mathbf{3 5 , 0 0 0}\) & Total & \\
\hline
\end{tabular}

Example: (Preparation of balance sheet of reconstituted firm)
Himani and Harsha are partners in a firm. Their Balance Sheet on March 31, 2006 was as follows:

\section*{Balance Sheet of Himani and Harsha as on March 31, 2006}
\begin{tabular}{|c|c|c|c|}
\hline Liabilities & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & Assets & Amount
(₹) \\
\hline Provision for Doubtful & 3,000 & Cash & 20,000 \\
\hline Debts & & Sundry Debtors & 90,000 \\
\hline Creditors & 36,000 & Stock & 45,000 \\
\hline Bills Payable & 15,000 & Machinery & 41,000 \\
\hline Outstanding Expenses & 2,000 & Building & 1,10,000 \\
\hline Capitals: & & Goodwill & 40,000 \\
\hline Himani 1,70,000 & & & \\
\hline Harsha \(\quad 1,20,000\) & 2,90,000 & & \\
\hline & 3,46,000 & & 3,46,000 \\
\hline
\end{tabular}

Notes On April 1, 2006 they admitted Charu as a Partner on the following terms:
1. Charu brings ₹ 90,000 as her share of capital and she is unable to bring any amount for goodwill.
2. Goodwill is valued at 2 Years purchase of the average profit of last 4 years. The Profit of last 4 years amounted to ₹ 20,000 ; ₹ 30,000 ; ₹ 30,000 ; ₹ 40,000 Respectively.
3. New Profit sharing ratio between Himani's, Harsha's and Charu are \(3: 2: 1\).
4. Outstanding Expenses to be brought down to ₹ 500 .
5. The provision for doubtful debts is to be increased up to \(5 \%\) on Debtors.
6. Machinery is depreciated by \(10 \%\) and Stock is valued at \(₹ 47,000\).

Prepare Revaluation Account, Partners Capital account and opening Balance sheet of the new firm.

\section*{Solution:}

\section*{Revaluation Account}

Dr.
Cr.
\begin{tabular}{|c|c|c|c|}
\hline Particulars & Amount (₹) & Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline Provision for Doubtful & 1,500 & \multirow[t]{2}{*}{Outstanding Expenses Stock} & 1,500 \\
\hline Debts & & & 2,000 \\
\hline \multirow[t]{4}{*}{Machinery} & 4,100 & \multirow[t]{4}{*}{\begin{tabular}{l}
Loss on revaluation transferred to Himani's Capital A/c 1,050 \\
Harsha's Capital A/c 1,050
\end{tabular}} & \\
\hline & & & \\
\hline & & & 2,100 \\
\hline & 5,600 & & 5,600 \\
\hline
\end{tabular}

Capital Account
Dr.
Cr.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Particulars & Himani (Rs) & \begin{tabular}{l}
Harsha \\
(Rs)
\end{tabular} & \begin{tabular}{l}
Charu \\
(Rs)
\end{tabular} & Particulars & Himani (Rs) & Harsha
(Rs) & Charu
(Rs) \\
\hline Goodwill A/c & 20,000 & 20,000 & - & Balance b/d & 1,70,000 & 1,20,000 & - \\
\hline Revaluation \(\mathrm{A} / \mathrm{c}\) & 1,050 & 1,050 & & Charu's Capital A/c & - & 10,000 & - \\
\hline (loss) & & & & Bank A/c & - & - & 90,000 \\
\hline Harsha,s Capital & & & 10,000 & & & & \\
\hline Balance c/d & 1,48,950 & 1,08,950 & 80,000 & & & & \\
\hline & 1,70,000 & 1,30,000 & 90,000 & & 1,70,000 & 1,30,000 & 90,000 \\
\hline
\end{tabular}

\section*{Balance Sheet of Himani, Harsha and Charu \\ as on March 31, 2007}
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \multicolumn{1}{|c|}{\begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular}} & \multicolumn{1}{c|}{ Assets } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Provision for Doubtful & 4,500 & Cash & 70,000 \\
Debts & & Bank & 90,000 \\
& & Sundry Debtors & 90,000 \\
Creditors & 36,000 & Stock & 47,000 \\
Bills Payable & 15,000 & Machinery & 36,900 \\
Outstanding Expenses & 500 & Building & \(1,10,000\) \\
Capitals: & & & \\
Himani & \(1,48,950\) & & \\
Harsha & \(1,08,950\) & & \\
Charu & 80,000 & \(3,37,900\) & \\
& & \(3,93,900\) & \\
& & & \\
\hline
\end{tabular}

Working Note:
(i) Valuation of Goodwill:

Total Profit = ₹ 20,000 + ₹ 30,000 + ₹ 30,000 + ₹ 40,000
Average Profit = ₹ 1,20,000/4
\[
\text { = ₹ } 30,000
\]

Goodwill \(=₹ 30,000 \times 2=₹ 60,000\)
Charu's Share of Goodwill \(=₹ 60,000 \times 1 / 6=₹ 10,000\)
(ii) Computation of sacrificing ratio:

Sacrificing Ratio \(=\) Existing Ratio - New Ratio
Himani's \(=\frac{1}{2}-\frac{3}{6}=0\)

Harsha' \(s=\frac{1}{2}-\frac{2}{6}=\frac{1}{6}\)

\section*{Memorandum Revaluation A/c}

At the time of admission of a partner after revaluation of assets and liabilities, if all the partners do not want to show the revised value of assets and liabilities in their new balance sheet, then under such circumstances the revaluation \(\mathrm{A} / \mathrm{c}\) is reopened, which is known as Memorandum revaluation \(\mathrm{A} / \mathrm{c}\). In such case, all entries passed through revaluation account are reversed. For example, if revaluation \(A / c\) was debited and plant \(A / c\) was credited earlier now the plant \(A / c\) would be debited and revaluation \(\mathrm{A} / \mathrm{c}\) would be credited. Subsequently, a new revaluation \(\mathrm{A} / \mathrm{c}\) comes into existence which is known as Memorandum Revaluation \(\mathrm{A} / \mathrm{c}\). The memorandum revaluation \(\mathrm{A} / \mathrm{c}\) is closed by transferring the balance to all the partners including new one in new profit sharing ratio.

Notes The given below is the proforma of Memorandum Revaluation A/c:

\section*{Proforma of Memorandum Revaluation Account}


Example: A and B are partners in a firm sharing profits in the ratio \(2: 1 . \mathrm{C}\) is admitted into the firm with \(1 / 4\) th share in profits. He will bring in ₹ 30,000 as capital and capitals of A and B are to be adjusted in the profit sharing ratio. The Balance sheet of A and B as on March 31, 2002 (before \(\mathrm{C}^{\prime}\) s admission) was as under:

Balance Sheet of A and B as at March 31, 2002
\begin{tabular}{|c|c|c|c|}
\hline Liabilities & Amount (₹) & Assets & Amount (₹) \\
\hline Creditors & 8,000 & Cash in hand & 2,000 \\
\hline Bills Payable & 4,000 & Cash at bank & 10,000 \\
\hline General Reserve & 6,000 & Sundry debtors & 8,000 \\
\hline Capitals: \(\quad 50,000\) & & Stock on Hand & 10,000 \\
\hline \(\underline{32.000}\) & 82,000 & Furniture & 5,000 \\
\hline & & Machinery & 25,000 \\
\hline & & Building & 40,000 \\
\hline Total & 1,00,000 & Total & 1,00,000 \\
\hline
\end{tabular}

Other terms of agreement are as under:
(i) C will bring in \(₹ 12,000\) as his share of goodwill.
(ii) Building was valued at ₹ 45,000 and Machinery at ₹ 23,000 .
(iii) A provision for bad debts is to be created @ 6\% on debtors.

The partners decide to keep the value of the assets and liabilities the same and hence their book values will not change due to the above adjustments. Show the necessary ledger accounts and prepare the balance sheet after C's admission.

\section*{Memorandum Revaluation A/c}
\begin{tabular}{|c|c|c|c|}
\hline Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline To Machinery (₹ 25,000-₹ 23,000 ) & 2,000 & \multirow[t]{6}{*}{By building (₹ 45,000-₹ 40,000)} & \multirow{5}{*}{5,000} \\
\hline To provision for bad and doubtful debts ( \(6 \%\) of ₹ 8,000 ) & 480 & & \\
\hline To Profit on revaluation A/c & & & \\
\hline A 1,680 & & & \\
\hline B 840 & 2,520 & & \\
\hline & 5,000 & & 5,000 \\
\hline \multirow[t]{6}{*}{\begin{tabular}{l}
To machinery \\
To Provision for bad and doubtful debts \\
To Partners Capital A/c - Loss on Revaluation \\
A \(-2 / 4\) of ₹ \(2520=₹ 1260\) \\
B \(-1 / 4\) of ₹ \(2520=₹ 630\) \\
C \(-1 / 4\) of \(₹ 2520=₹ 630\)
\end{tabular}} & 2,000 & \multirow[t]{7}{*}{By Building} & \multirow[t]{7}{*}{5,000} \\
\hline & 480 & & \\
\hline & \multirow[b]{5}{*}{2,520} & & \\
\hline & & & \\
\hline & & & \\
\hline & & & \\
\hline 2,520 & & & \\
\hline & 5,000 & & 5,000 \\
\hline
\end{tabular}

Partner's Capital A/c
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Particulars & A (₹) & B (₹) & C (₹) & Particulars & A (₹) & B (₹) & C (₹) \\
\hline To Revaluation A/c - loss & 1,260 & 630 & 630 & \begin{tabular}{l}
By balance b/d \\
By cash A/c
\end{tabular} & 50,000 & \[
\begin{aligned}
& \hline \text { 32,000 } \\
& ------
\end{aligned}
\] & 30,000 \\
\hline \multirow{3}{*}{To balance c/d} & \multirow{3}{*}{62,420} & \multirow{3}{*}{3,8210} & \multirow{3}{*}{29,370} & By Premium & 8,000 & 4,000 & ---- \\
\hline & & & & \begin{tabular}{l}
By profit on revaluation \\
By general
\end{tabular} & 1,680 & 840 & \\
\hline & & & & By general reserve & 4,000 & 2,000 & \\
\hline & 63,680 & 38,840 & 30,000 & & 63,680 & 38,840 & 30,000 \\
\hline
\end{tabular}

Balance Sheet of A, B and C as at March 31, 2002
(After Admission)


\section*{Working Note:}
1. Computation of New Profit Sharing Ratio

C's share of profit \(\quad=1 / 4\)
Remaining share \(=3 / 4\)
A's new share \(\quad=2 / 3\) of \(3 / 4=1 / 2\)
B's new share \(\quad=1 / 3\) of \(3 / 4=1 / 4\)
Thus new profit sharing ratio of \(\mathrm{A}, \mathrm{B}\) and C
\[
=2: 1: 1
\]
2. General reserves should be distributed between the old partners in their old profit sharing ratios.

\section*{Self Assessment}

Fill in the blanks:
11. At the time of admission of a new partner, it is always desirable to ascertain whether the assets of the firm are shown in books at their \(\qquad\) values.
12. For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called \(\qquad\)
13. The revaluation account is \(\qquad\) with increase in the value of assets.
14. Gain on revaluation or loss on revaluation will be transferred to the \(\qquad\) of the old partners in old ratio.
15. Decrease of assets and increase in the value of liabilities is \(\qquad\) to revaluation account.

\subsection*{3.4 Summary}
- When a business enterprise requires additional capital or managerial help or both for expansion of the business it may admit a new partner to supplement its existing resources.
- According to the Partnership Act 1932, no new partner can be introduced into a firm without the consent of all the existing partners.
- The new partner acquires his share in profits from the old partners.
- The ratio in which the old partners agree to sacrifice their share of profit in favour of the incoming partner is called sacrificing ratio.
- The term goodwill means the value of the reputation of a firm in respect of the profit earned in future over and above the normal profit.
- On the eve of the admission, the new partner who is going to acquire the right to share future profits must compensate the existing partners by making payment to them.
- For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called Revaluation Account.
- Gain on revaluation or loss on revaluation will be transferred to the capital accounts of the old partners in old ratio.

\subsection*{3.5 Keywords}

Goodwill: The term goodwill means the value of the reputation of a firm in respect of the profit earned in future over and above the normal profit.

Revaluation \(a / c\) : For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called Revaluation Account.

Sacrificing ratio: The ratio in which the old partners agree to sacrifice their share of profit in favour of the incoming partner is called sacrificing ratio.

\subsection*{3.6 Review Questions}
1. \(X\) and \(Y\) are partners sharing profits and losses in proportion of \(3: 1\). They admit a new partner Z whom they give \(1 / 4^{\text {th }}\) share in profits. Calculate new profit sharing ratio.
2. \(A\) and \(B\) share profits in the ratio of \(7: 3\). \(C\) was admitted as a partner. A surrendered \(1 / 7\) th of his share and \(B 1 / 3\) rd of his share in favour of \(C\). Calculate new profit sharing ratio.
3. A and B are in partnership sharing-profits in the ratio of \(3: 2\) respectively. C is admitted into the partnership. The new profit sharing ratio will be A 5, B 3 and C 2 . Calculate sacrificing ratio.
4. Explain 'Revaluation Account'. Why assets are liabilities are revalued at the time of admission of a new partner?
5. Rohit and Meena are partners sharing and losses in the ratio of \(7: 3\). Rohit surrenders \(1 / 7\) of his share and Meena surrenders \(1 / 3\) of his share in favour of Teena, a new partner. Calculate the new profit sharing ratio.
6. John and Mike were partners in a firm sharing profits in 3:1 ratio. They admitted Wahid as a new partner for \(1 / 6\) th share in the profits of the firm. Wahid acquired his share from John and Mike in the ratio \(2: 1\). Calculate the new profit sharing ratio of John, Mike and Wahid.
7. \(A\) and \(B\) are partners sharing profits as \(2: 1\). Following is their Balance Sheet as on December 31, 2001:

Balance Sheet of A and B as on Dec 31, 2001
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Liabilities} & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & Assets & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline \multicolumn{2}{|l|}{Creditors} & 10,000 & Cash in Hand and at Bank & 1.000 \\
\hline A's Capital & 18,000 & & Debtors & 10,000 \\
\hline B's Capital & 17.000 & 35,000 & Stock & 20.000 \\
\hline Reserve & & 6,000 & Land and Building & 20,000 \\
\hline Total & & 51,000 & Total & 51,000 \\
\hline
\end{tabular}

On January 1, 2002, C is admitted into partnership for 1/4th share on the following terms:
(a) That he should bring in ₹ 15,000 as his capital and ₹ 6,000 as premium for his share of goodwill.
(b) That land and building be revalued at ₹ 25,000 and stock at ₹ 18,500 .

Notes (c) That ₹ 500 be provided for doubtful debts.
(d) That after the above adjustments, the capital of the old partners be adjusted on the basis of the new partner's capital, having regard to profit sharing ratio. Excess or shortage will be adjusted through actual cash.
Record the necessary journal entries.
8. The following is the Balance Sheet of Tarun and Ashima sharing profit and losses in the ratio of \(2: 1\).
\begin{tabular}{|l|r|r|l|r|}
\hline Liabilities & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & \multicolumn{1}{|c|}{ Assets } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Capitals: & & Cash & 12,000 \\
Tarun & 50,000 & & Sundry Debtors & 60,000 \\
Ashima & 40,000 & 90,000 & Stock & 12,000 \\
Sundry creditors & & 20,000 & Furniture & 6,000 \\
& & Building & 20,000 \\
\cline { 5 - 5 } & & \(1,10,000\) & & \(1,10,000\) \\
\hline
\end{tabular}

They agreed to admit Sunita into partnership on the following terms:
(i) Sunita to pay ₹ 9,000 as Goodwill.
(ii) Sunita bring ₹ 11,000 as her Capital for \(1 / 4\) share of profit in the business.
(iii) Building and furniture to be depreciated at 5\%. Stock is reduced by ₹ 1,600 and Bad Debt Reserve ₹ 1,300 to be provided for.

Prepare necessary ledge account and balance sheet after admission.
9. George and Henry are partners sharing profits in the ratio of \(3: 2\). They decided to admit David as a new partner and to share future profits and losses equally. David brings in \(₹ 50,000\) as his capital. Goodwill of the firm is valued at ₹ 60,000 . Record the necessary journal entries -
(a) When no goodwill appears in books.
(b) When goodwill appears at ₹ 50,000 , and
(c) When goodwill appears at ₹ \(1,00,000\).
10. Explain the methods of valuation of goodwill.

\section*{Answers: Self Assessment}
\begin{tabular}{llll} 
1. & consent & 2. & old partners \\
3. & sacrificing ratio & 4. & Existing Ratio \\
5. & existing & 6. & true \\
7. & false & 8. & true \\
9. & false & 10. & true \\
11. & current & 12. & Revaluation Account \\
13. & credited & 14. & capital accounts \\
15. & debited & &
\end{tabular}

\subsection*{3.7 Further Readings}
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\section*{Objectives}

After studying this unit, you will be able to:
- Compute partner's capital
- Prepare balance sheet of new firms

\section*{Introduction}

Sometimes, it is possible that the partners decide to adjust their capital so as to be proportionate to their profit sharing ratio. If the capital of the new partner is given, the same can be used as a base for calculating the new capitals of the old partners. After making the necessary adjustments the partners can compare their new capital with the old capital and the partner whose capital falls short, will bring in the necessary amount and the partner who has a surplus, will withdraw excess amount of capital.

\subsection*{4.1 Adjustment of Partner's Capital}

The partners can decide to maintain their new capital on the following basis:
- On the basis of new Partner's Capital and his profit sharing ratio
- On the basis of the existing partner's capital account balances

\subsection*{4.1.1 On the Basis of new Partner's Capital and his Profit Sharing Ratio}

If the capital of the new partner is given, the entire capital of the new firm will be determined on the basis of the new partner's capital and his profit sharing ratio. Therefore the capital of other partners is ascertained by dividing the total capital as per his profit sharing ratio.


Caution If the existing capital of the partner after adjustment is in excess of his new capital, the excess amount is withdrawn by partner or transferred to the credit of his current account. If the existing capital of the partner is less than his new capital, the partner brings the short amount or makes transfer to the debit of his current account.

The journal entries are made as under:
(i) When excess amount is withdrawn by the partner or transferred to current account.

Existing Partner's Capital A/c Dr.
To Bank A/c or Partner Current A/c
(Excess amount is withdrawn by the partner or transferred to current account)
(ii) For bringing in the Deficit amount or Balance transferred to current account.

Bank A/c or Partner Current A/c
To Existing Partner's Capital A/c
(Bringing the Deficit amount or Balance transferred to current account)


Example: A and B are partners sharing profit in the ratio of \(5: 3\) with capital of ₹ 80,000 and ₹ 70,000 respectively. They admit a new partner C. The new profit sharing ratio of A, B and C is 5:3:2 respectively. C brings ₹ 40,000 as capital. The profit on revaluation of assets and reassessment of liabilities is ₹ 6,400 . It is agreed that capitals of the partner's should be in the new profit sharing ratio. Calculate new capital of each partner.

\section*{Solution:}

Actual Capital of A and B
\begin{tabular}{lll} 
& A & B \\
& (₹) & (₹) \\
Balance in Capital A/c & 80,000 & 70,000 \\
Add Profit on Revaluation \((5: 3)\) & 4,000 & 2,400 \\
Capital after Adjustment & 84,000 & 72,400
\end{tabular}

Calculation of new capital of the firm and existing partner's capital
C's Share in the firm \(=2 / 10\)
C's brings 40,000 for 2/10 Share
Total capital of the new firm in terms of C's capital
\[
\begin{aligned}
& =40,000 \times 10 / 2 \\
& =₹ 2,00,000 \\
\text { A's share in New Capital } & =2,00,000 \times 5 / 10=₹ 1,00,000 \\
\text { B's share in New Capital } & =2,00,000 \times 3 / 10=₹ 60,000
\end{aligned}
\]

On comparing A's adjusted capital with the new capital we find that the A brings ₹ 16,000 [ \(₹ 1,00,000-₹ 84,000\) ] or the amount may be debited to his current account.
Notes On comparing the B's adjusted capital with the new capital, we find that the \(B\) is to withdraw
\(₹ 12,400\) [ \(72,400-₹ 60,000\) ] or the amount may be credited to his current account.

\subsection*{4.1.2 On the Basis of the Existing Partner's Capital Account Balances}

Sometimes the capital of the new partner is calculated on the basis of existing partners. The partner is required to bring an amount proportionate to his/her share of profit. In such a case, new partner's capital will be calculated on the basis of adjusted capital of the existing partners.

= =五Example: The capital account of X and Y show the balance after all adjustments and revaluation are \(₹ 100,000\) and \(₹ 50,000\), respectively.

They admit \(Z\) as a new partner for \(1 / 4\) share in the profits. \(Z\) 's capital is calculated as follows:
Total share \(=1\)
Z's share in the profit \(=1 / 4\)
Remaining share \(=1-1 / 4=3 / 4\)
\(3 / 4\) share of profit combined capital of \(X\) and \(Y=₹ 100,000+₹ 50,000=₹ 1,50,000\)
Total Capital of the firm \(=₹ 1,50,000 \times 4 / 3=₹ 2,00,000\)
Z's capital for \(1 / 4\) share of profits \(=₹ 2,00,000 \times 1 / 4=₹ 50,000\)
Z brings in ₹ 50,000 as his Capital

\(\mathrm{X}, \mathrm{Y}\) and Z are partners in a firm sharing profits the ratio of 3:2:1. D is admitted into the firm for \(1 / 4\) share in profits, which he gets as \(1 / 8\) from \(X\) and \(1 / 8\) from \(Y\). The total capital of the firm is agreed upon as \(₹ 1,20,000\) and \(D\) is to bring in cash equivalent to \(1 / 4\) of this amount as his capital. The capitals of other partners are also to be adjusted in the ratio of their respective shares in profits and losses. The respective capitals of \(\mathrm{X}, \mathrm{Y}\) and Z after all adjustments have been made, works out at ₹ 40,000 , ₹ 35,000 and ₹ 30,000 , respectively. Calculate the final capitals of \(\mathrm{X}, \mathrm{Y}\) and Z .

\section*{Self Assessment}

Fill in the blanks:
1. If the capital of the new partner is given, the entire capital of the new firm will be determined on the basis of the new partner's capital and his \(\qquad\)
2. If the existing capital of the partner after adjustment is in excess of his new capital, the excess amount is \(\qquad\) . by partner or transferred to the credit of his current account.
3. If the existing capital of the partner is less than his new capital, the partner brings the short amount or makes transfer to the debit of his \(\qquad\)
4. Sometimes the capital of the new partner is calculated on the basis of \(\qquad\)
5. New partner's capital will be calculated on the basis of \(\qquad\) . of the existing partners.

\subsection*{4.2 Preparation of Balance Sheet of New Firm}

After making all the necessary adjustments and assets revaluation the next step is to prepare the balance sheet of new firm. To know the true position of the new firm it is necessary to make the assets revaluation and capital adjustments. The following examples illustrate the preparation of new firm's balance sheet.


Example: A and B are partners in a firm sharing profits in the ratio 2:1. C is admitted into the firm with 1/4th share in profits. He will bring in ₹ 30,000 as capital and capitals of A and B are to be adjusted in the profit sharing ratio. The Balance sheet of A and B as on March 31, 2002 (before C's admission) was as under:

Balance Sheet of A and B as at March 31, 2002
\begin{tabular}{|c|c|c|c|}
\hline Liabilities & Amount (₹) & Assets & Amount (₹) \\
\hline Creditors & 8,000 & Cash in hand & 2,000 \\
\hline Bills Payable & 4,000 & Cash at bank & 10,000 \\
\hline General Reserve & 6,000 & Sundry debtors & 8,000 \\
\hline & & Stock on Hand & 10,000 \\
\hline Capitals: 50,000 & & Furniture & 5,000 \\
\hline 32,000 & 82,000 & Machinery & 25,000 \\
\hline & & Building & 40,000 \\
\hline & 10,0000 & & 1,00,000 \\
\hline
\end{tabular}

Other terms of agreement are as under:
(i) C will bring in \(₹ 12,000\) as his share of goodwill.
(ii) Building was valued at ₹ 45,000 and Machinery at ₹ 23,000 .
(iii) A provision for bad debts is to be created @ 6\% on debtors.
(iv) The Capital accounts of A and B are to be adjusted by opening current accounts.

Record necessary journal entries, show necessary ledger accounts and prepare the balance sheet after C's admission.

\section*{Notes}

\section*{Solution:}

\section*{Books of A, B and C Journal}
\begin{tabular}{|c|c|c|c|c|}
\hline Date & Particulars & L.F. & Debit Amount (₹) & Credit Amount (₹) \\
\hline \multirow[t]{7}{*}{Mar 1} & Cash A/c Dr.
To C's capital A/c
To Goodwill (Premium) A/c
(Cash brought by C for capital and
goodwill) & \multirow[t]{7}{*}{} & 42,000 & \[
\begin{aligned}
& 30,000 \\
& 12,000
\end{aligned}
\] \\
\hline & \begin{tabular}{l}
Goodwill (Premium) A/c \\
To A's capital A/c \\
To B's capital A/c \\
(Goodwill brought by C transferred to the capital accounts of A and B in their sacrificing ratio)
\end{tabular} & & 12,000 & \[
\begin{aligned}
& 8,000 \\
& 4,000
\end{aligned}
\] \\
\hline & \begin{tabular}{l}
Revaluation \(\mathrm{A} / \mathrm{c}\) \\
To Machinery A/c \\
To provision for bad and doubtful debts A/c \\
(Decrease in the value of machinery and creation of provision for bad debts)
\end{tabular} & & \[
2,480
\] & \[
\begin{array}{r}
2,000 \\
480
\end{array}
\] \\
\hline & \begin{tabular}{l}
Building A/c \\
To Revaluation A/c \\
(Increase in the value of building)
\end{tabular} & & 5,000 & 5,000 \\
\hline & \begin{tabular}{l}
Revaluation A/c \\
To A's Capital A/c \\
To B's Capital A/c \\
(Transfer of gain on revaluation to old partners' capital accounts)
\end{tabular} & & 2,520 & \[
\begin{array}{r}
1,680 \\
840
\end{array}
\] \\
\hline & \begin{tabular}{l}
General Reserve A/c \\
Dr. \\
To A's Capital A/c \\
To B's Capital A/c \\
(Undistributed profit transferred to A and B)
\end{tabular} & & 6,000 & \[
\begin{aligned}
& 4,000 \\
& 2,000
\end{aligned}
\] \\
\hline & \begin{tabular}{lr} 
A's Capital A/c & Dr. \\
B's Capital A/c & Dr. \\
To A's Current A/c & \\
To B's Current A/c & \\
(The excess of capitals transferred \\
to partner's current accounts)
\end{tabular} & & \[
\begin{aligned}
& 3,680 \\
& 8,840
\end{aligned}
\] & \[
\begin{aligned}
& 3,680 \\
& 8,840
\end{aligned}
\] \\
\hline
\end{tabular}

Revaluation Account
Notes
Dr.
Cr.
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & Particulars & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline \begin{tabular}{l} 
Machinery \\
Provision for Bad and
\end{tabular} & 2,000 & Building & 5,000 \\
\begin{tabular}{l} 
Doubtful Debts \\
\begin{tabular}{l} 
Capital Accounts (transfer \\
of gain on revaluation) \\
A
\end{tabular} \\
B
\end{tabular} & 480 & & \\
\hline \multicolumn{1}{|c|}{\begin{tabular}{l} 
Total
\end{tabular}} & & & \\
\hline
\end{tabular}

\section*{Partners' Capital Accounts}

Dr.
Cr.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Date & Partculars & J.F. & \[
\begin{gathered}
\text { A } \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{gathered}
\hline B \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{gathered}
C \\
\text { (₹) }
\end{gathered}
\] & Date & Partculars & J.F. & \[
\begin{gathered}
\hline \text { A } \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{gathered}
\hline B \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{gathered}
C \\
\hline \text { (₹) }
\end{gathered}
\] \\
\hline & \begin{tabular}{l}
Current \\
Balance \(\mathrm{c} / \mathrm{f}\)
\end{tabular} & & \[
\left.\begin{gathered}
3.680 \\
60.000
\end{gathered} \right\rvert\,
\] & \[
\begin{gathered}
8.840 \\
30,000
\end{gathered}
\] & 30.000 & & \begin{tabular}{l}
Balance b/f Cash \\
Premilum Revaluation (Transfer of profit General Reserve
\end{tabular} & & \[
\begin{array}{r}
\hline 50.000 \\
8.000 \\
1.680 \\
4.000
\end{array}
\] & \[
\begin{array}{r}
32.000 \\
- \\
4.000 \\
840 \\
2.000
\end{array}
\] & 30.000 \\
\hline & Total & & 63,680 & 38,840 & 30,000 & & Total & & 63,680 & 38,840 & 30,000 \\
\hline
\end{tabular}

\section*{Partners' Current Accounts}

Dr. Cr.
\begin{tabular}{|c|l|c|c|c|c|c|l|l|c|c|c|}
\hline Date & Particulars & J.F. & \begin{tabular}{c}
\(A\) \\
\((₹)\)
\end{tabular} & \begin{tabular}{c}
\(B\) \\
\((₹)\)
\end{tabular} & \begin{tabular}{c}
\(C\) \\
\((₹)\)
\end{tabular} & Date & Particulars & J.F. & \begin{tabular}{c}
\(A\) \\
\((₹)\)
\end{tabular} & \begin{tabular}{c}
\(B\) \\
\((₹)\)
\end{tabular} & \begin{tabular}{c}
\(C\) \\
\((₹)\)
\end{tabular} \\
\hline & Balance \(\mathrm{c} / \mathrm{f}\) & & 3,680 & 8,840 & - & & Capital & & 3.680 & 8.840 & \\
\hline
\end{tabular}

Balance Sheet of A, B and C as at March 31, 2002
(After Admission)


\section*{Notes \\ Working Notes:}
1. New Profit Sharing Ratio: Since nothing is given as to how \(C\) acquired his share from \(A\) and B. It is assumed that A and B, between themselves continue to share the profits in the old ratio of 2:1
\begin{tabular}{ll} 
C's share of profits & \(=1 / 4\) \\
Remaining Share & \(=1-1 / 4=3 / 4\) \\
A's new share & \(=2 / 3\) of \(3 / 4=6 / 12=1 / 2\) \\
B's new share & \(=1 / 3\) of \(3 / 4=3 / 12=1 / 4\)
\end{tabular}

Thus, new profit sharing ratio between \(A, B\) and \(C\) is 2:1:1
2. New Capitals of A and B: C's capital is ₹ 30,000 and his share of profits is \(1 / 4\). Based on C's capital the total capital of the firm will work out at ₹ \(1,20,000(4 / 1 \times 30,000)\). Hence, based on their respective shares of profits, the capitals of A and B will be as follows:
\[
\begin{array}{lll}
\text { A's Capital } & =2 / 4 \text { of } 120000 & =₹ 60000 \\
\text { B's Capital } & =1 / 4 \text { of } 120000 & =₹ 30000
\end{array}
\]

\section*{Self Assessment}

State whether the following statements are true or false:
6. Balance sheet of new firm records the assets and liabilities at the value before revaluation.
7. Balance sheet records the partner's capital after adjustment.

\subsection*{4.3 Summary}
- Sometimes, it is possible that the partners decide to adjust their capital so as to be proportionate to their profit sharing ratio.
- If the capital of the new partner is given, the entire capital of the new firm will be determined on the basis of the new partner's capital and his profit sharing ratio.
- If the existing capital of the partner after adjustment is in excess of his new capital, the excess amount is withdrawn by partner or transferred to the credit of his current account.
- If the existing capital of the partner is less than his new capital, the partner brings the short amount or makes transfer to the debit of his current account.
- Sometimes the capital of the new partner is calculated on the basis of existing partners.
- The partner is required to bring an amount proportionate to his/her share of profit.
- To know the true position of the new firm it is necessary to make the assets revaluation and capital adjustments.

\subsection*{4.4 Keywords}

Revaluation \(A / c\) : For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called Revaluation Account.

Revaluation of Assets and Liabilities: On admission of a new partner, the firm is reconstituted and the assets are revalued and liabilities are reassessed.

Sacrificing Ratio: The ratio in which the old partners agree to sacrifice their share of profit in favour of the incoming partner is called sacrificing ratio.

\subsection*{4.5 Review Questions}
1. Explain the calculation of the proportionate capital of the new partner in case of admission of a partner.
2. Ram and Shyam were partners in a firm sharing profits and losses in the ratio of \(2: 1\) with capitals of \(₹ 40,000\) and \(₹ 30,000\) respectively. They decided to admit Mohan into partnership on conditions that he would bring in ₹ 20,000 as his capital and ₹ 6,000 for his share of goodwill for \(1 / 4^{\text {th }}\) share of profits. Half of the amount of goodwill was withdrawn by the existing partners. The capital of the partners in the New firm were to be arranged in profit sharing ratio on the basis of Mohan's Capital and excess or deficit capital to be adjusted in cash.

Give the necessary journal entries to record the transactions and show the capital accounts of the partners and the cash account.
3. \(A\) and \(B\) are partners sharing profits in the ratio of \(4: 1\). They admit \(C\) as a new partner who brings ₹ 15,000 as his share of goodwill (premium). C is entitled to \(1 / 3\) rd share in profits. As between themselves, \(A\) and \(B\) agree to share future profits and losses equally.

You are required to:
(a) Calculate the new profit sharing ratio
(b) Record journal entries showing the appropriation of premium.
4. Swadesh and Swaraj were partners sharing profits equally. Their Balance Sheet as on March 31, 2002 was as follows:
\begin{tabular}{|l|r|lr|c|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \multicolumn{1}{|c|}{ Amount } & \multicolumn{1}{|c|}{ Assets } & Amount \\
\hline & \multicolumn{1}{|c|}{\((₹)\)} & & \((₹)\) \\
\hline Creditors & 50,000 & Cash & & 12,000 \\
Bills Payable & 15,000 & Cash at Bank & & 15,000 \\
Outstanding Expenses & 3,000 & Debtors & 20,000 & \\
Capital: & & Less Provision & \(\underline{500}\) & 19,500 \\
Swadesh & 60,000 & & Stock & 20,000 \\
Swaraj & \(\underline{40,000}\) & \(1,00,000\) & Furniture & 10,000 \\
& & Machinery & 18,000 \\
& & Land \& Building & 73,500 \\
\hline \multicolumn{1}{|c|}{ Total } & & \(\mathbf{1 , 6 8 , 0 0 0}\) & Total & \(\mathbf{1 , 6 8 , 0 0 0}\) \\
\hline
\end{tabular}

On that date, they agreed to admit Sambhav as a partner on the following terms:
(a) Sambhav shall get \(1 / 5\) th share in profits and he will bring ₹ 20,000 as his capital and \(₹ 5,000\) as his share of goodwill.
(b) Goodwill brought by Sambhav shall be withdrawn by Swadesh and Swaraj.
(c) Provision for bad and doubtful debts should be brought up to \(5 \%\) on debtors.
(d) Machinery be depreciated by ₹ 2,000 and furniture by \(12.5 \%\).
(e) Stock be valued at ₹ 23,000 .

Notes (f) Land \& Building be appreciated by 20\%, and
(g) Investments of ₹ 2,000 which did not appears in books should be duly recorded.

Record necessary journal entries and prepare the Balance Sheet of the new firm.
5. A and B are partners sharing profits as \(2: 1\). Following is their Balance Sheet as on December 31, 2001

Balance Sheet of A and B as on Dec 31, 2001
\begin{tabular}{|ll|r|l|c|}
\hline Liabilities & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & Assets & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Creditors & & 10,000 & Cash in Hand & \\
& & & and at Bank & 1,000 \\
A's Capital & 18,000 & & Debtors & 10,000 \\
B's Capital & \(\underline{17,000}\) & 35,000 & Stock & 20,000 \\
Reserve & & 6,000 & Land and Building & 20,000 \\
\hline Total & & \(\mathbf{5 1 , 0 0 0}\) & Total & \(\mathbf{5 1 , 0 0 0}\) \\
\hline
\end{tabular}

On January 1, 2002, C is admitted into partnership for 1/4th share on the following terms:
(a) That he should bring in ₹ 15,000 as his capital and ₹ 6,000 as premium for his share of goodwill.
(b) That land and building be revalued at ₹ 25,000 and stock at ₹ 18,500 .
(c) That ₹ 500 be provided for doubtful debts.
(d) That after the above adjustments, the capital of the old partners be adjusted on the basis of the new partner's capital, having regard to profit sharing ratio. Excess or shortage will be adjusted through actual cash.

Record necessary journal entries and prepare Capital Accounts and new Balance Sheet of the partners.
6. The Balance Sheet of Alka and Bandana carrying on business in partnership and sharing profits in proportion of \(2 / 3\) rd and \(1 / 3\) rd respectively, stood as follows:

Balance Sheet of Alka and Bandana as at March 31, 2003
\begin{tabular}{|l|r|l|r|}
\hline Liabilities & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & Assets & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Alka's Capital & 51,450 & Machinery & 50,000 \\
Bandana's Capital & 36,750 & Furniture & 3,000 \\
Reserve & 1,500 & Debtors & 18.000 \\
Creditors & 10,300 & Stock & 27,000 \\
& & Cash & 2,000 \\
\hline \multicolumn{1}{|c|}{ Total } & \(\mathbf{1 , 0 0 , 0 0 0}\) & Total & \(\mathbf{1 , 0 0 , 0 0 0}\) \\
\hline
\end{tabular}

They admitted Chandana into partnership giving her \(1 / 5\) th share of profits on the following terms:
(a) The goodwill of the firm is to be valued at two year's profits calculated on the average of the 1st three-year's profits, which amounted to ₹ 20,000 , ₹ 15,000 and ₹ 22,000 .
(b) Chandana is to bring in cash for the amount of her share of goodwill
(c) Chandana is to bring in capital in proportion to her profit sharing arrangements with other partners.

Give journal entries and opening Balance Sheet of the firm and also state their future profit sharing ratio.
7. Illustrate the adjustment of partner's capital on the basis of new Partner's Capital and his profit sharing ratio.

\section*{Answers: Self Assessment}
1. Profit sharing ratio
2. Withdrawn
3. Current account
5. Adjusted capital
4. Existing partners
7. True

\subsection*{4.6 Further Readings}

Books
I.M. Pandey, Financial Management, Vikas Publishing, New Delhi.

Khan and Jain, Management Accounting.
Nitin Balwani, Accounting \& Finance for Managers, Excel Books, New Delhi.
Prasanna Chandra, Financial Management - Theory and Practice, Tata McGraw Hill, New Delhi (1994).
R.L. Gupta and Radhaswamy, Advanced Accountancy.
S. Bhat, Financial Management, Excel Books, New Delhi.
S.N. Maheswari, Management Accounting.
V.K. Goyal, Financial Accounting, Excel Books, New Delhi.

\section*{Unit 5: Retirement of Partner}

\author{
CONTENTS \\ Objectives \\ Introduction \\ 5.1 Computation of New Profit Sharing Ratio and Gaining Ratio \\ 5.2 Adjustment Regarding Goodwill \\ 5.3 Revaluation of Assets and Liabilities \\ 5.4 Accounting Treatment of Undistributed Profit \\ 5.5 Summary \\ 5.6 Keywords \\ 5.7 Review Questions \\ 5.8 Further Readings
}

\section*{Objectives}

After studying this unit, you will be able to:
- Compute gaining ratio
- Make adjustments regarding goodwill
- Construct revaluation \(\mathrm{A} / \mathrm{c}\)
- Illustrate accounting treatment of undistributed profit

\section*{Introduction}

An outgoing partner means a partner who has retired from a firm. The firm is reconstituted by the remaining partners. Section 32 contemplates three ways in which a partner may retire from the firm, viz., (i) he may retire at any time with the consent of all other partners; (ii) where there is an agreement between the partners about retirement, a partner may retire in accordance with the terms of that agreement; (iii) where the partnership is at will, a partner may retire by giving to his partners a notice of his intention to retire. Section 32 clearly comprehends a situation where a partner may retire without dissolving the firm.

\subsection*{5.1 Computation of New Profit Sharing Ratio and Gaining Ratio}

As soon as a partner retires the profit sharing ratio of the continuing partners get changed. At the time of retirement or death of a partner, the share of retiring/deceased partner is acquired by existing partners, on the basis of agreement among them. In the absence of information, the continuing partners take the retiring partner's share in their profit sharing ratio or in an agreed ratio. The ratio in which retiring partner's share is distributed amongst continuing partners' is known as "gaining ratio".

Gain of continuing partner \(=\) New share - Old share

Example: Sita, Rita and Raj are partners sharing profits in the ratio of 5:3:2. Due to some personal reasons Sita retires from the partnership. Calculate the new profit sharing ration and gaining ratio of remaining partners.

\section*{Solution:}
1. Calculation of new profit sharing ratio: In order to calculate new ratio of Rita and Raj, it is assumed that Sita's share of \(\frac{5}{10}\) will be taken up by Rita and Raj in their old profit sharing ratio

Rita's new share \(\quad=\frac{3}{10}+\left(\frac{5}{10} \times \frac{3}{5}\right)=\frac{3}{10}+\frac{15}{50}=\frac{30}{50}\)
Raj's new share \(\quad=\frac{2}{10}+\left(\frac{5}{10} \times \frac{2}{5}\right)=\frac{2}{10}+\frac{10}{50}=\frac{20}{50}\)
Therefore, the new profit sharing ration id 3:2
2. Calculation of gaining ratio: Gaining ratio \(=\) New share - Old share
(i) Rita's gain
\(=\frac{3}{5}-\frac{3}{10}=\frac{3}{10}\)
(ii) Raj's gain
\(=\frac{2}{5}-\frac{2}{10}=\frac{2}{10}\)


Ajay, Vijay and Veena are partners sharing profits in the ratio of 3:2:1. Ajay retires and his share is taken up by Vijay and Veena: (i) equally, (ii) in the ratio of \(3: 2\). Calculate the new profit sharing ratio.

\section*{Self Assessment}

Fill in the blanks:
1. \(\qquad\) clearly comprehends a situation where a partner may retire without dissolving the firm.
2. At the time of retirement or death of a partner, the share of retiring/deceased partner is acquired by \(\qquad\) partners.
3. The ratio in which retiring partner's share is distributed amongst continuing partners' is known as \(\qquad\)
4. In the absence of information, the continuing partners take the retiring partner's share in their \(\qquad\) or in an agreed ratio.
5. Gain of continuing partner \(=\) New share - \(\qquad\)

\section*{Notes \\ 5.2 Adjustment Regarding Goodwill}

At the time of retirement or death of a partner the retiring partner is entitled to his share of goodwill because the goodwill has been earned by the firm with the efforts of all the existing partners. The valuation of goodwill will be done as per the agreement among the partners. It is possible that company will earn some profit in near future because of the existing goodwill of the company. Therefore, the retiring/deceased partner should be compensated for the same by the continuing partners in their gaining ratio. For this purpose, the retiring/deceased partner's capital will be credited. In this case the following journal entry is recorded:
\[
\begin{array}{cc}
\text { Remaining partner's capital A/c (in the gaining ratio) } & \mathrm{Dr} \\
\text { To Retiring/deceased partner's capital A/c } &
\end{array}
\]
(Retiring partner's share of goodwill adjusted to remaining partners in the gaining ratio)

\section*{\({ }^{2} 9^{3}\) \\ Did u know? What is hidden goodwill?}

If the firm has agreed to settle the account of retiring/deceased partner by paying him a lump-sum amount, then amount paid to him in excess of his capital and share in reserves/ revaluation account etc. shall be treated as his share of goodwill. For example, A, B and C are partners. C retires, his capital account, after making adjustments for reserves and profit on revaluation exists at ₹ 80,000 . A and B have agreed to pay him ₹ 100,000 in full settlement of his claim. It implies that ₹ 20,000 is C's share in the goodwill of the firm. This will be treated by debiting ₹ 20000 in A \& B's capital account in their gaining ratio and crediting C's capital account.

Example: A, B and C are partners sharing profits in the ratio 5:3:2. A retires and goodwill is valued at \(₹ 54,000\). New profit sharing ratio of continuing partners will be equal. Pass the necessary journal entry.

\section*{Solution:}

Journal
\begin{tabular}{|l|ll|l|l|l|}
\hline Date & \multicolumn{1}{|c|}{ Particulars } & L.F. & \begin{tabular}{c} 
Debit \\
Amount (₹)
\end{tabular} & \begin{tabular}{c} 
Credit \\
Amount (₹)
\end{tabular} \\
\hline & \begin{tabular}{ll} 
B's Capital A/c & Dr. \\
C's Capital A/c \\
\begin{tabular}{l} 
To A's Capital A/c \\
\begin{tabular}{l} 
(Share of A's goodwill credited to his \\
capital A/c)
\end{tabular}
\end{tabular} Dr. & \\
10800 & \\
\hline
\end{tabular} \\
\hline
\end{tabular}

\section*{Working Notes:}

\section*{Calculation of Gaining Ratios}

Gain of partner \(=\) New share - Old share
B's Old share \(=\frac{3}{10}\)
B's new share \(=\frac{1}{2}\)
\[
\begin{aligned}
& \text { B's gain } \quad=\frac{1}{2}-\frac{3}{10}=\frac{2}{10} \\
& C^{\prime} \text { 's Old share }=\frac{2}{10} \\
& C^{\prime} \text { s new share }=\frac{1}{2} \\
& C^{\prime} \text { s gain } \quad=\frac{1}{2}-\frac{2}{10}=\frac{3}{10}
\end{aligned}
\]

Therefore, gaining ration is \(2: 3\)
\(\square\) Example: \(\mathrm{S}, \mathrm{U}\) and R are partners sharing profits in the ratio of \(3: 2: 1\). U wants to retire due to personal problems. For this purpose goodwill is valued at two years purchase of average super profits of last three years, the profit for the last three years are as under:
\begin{tabular}{ll}
\(1^{\text {st }}\) year & \(: ₹ 36,600\) \\
\(2^{\text {nd }}\) year & \(: ₹ 43,600\) \\
\(3^{\text {rd }}\) year & \(: ₹ 48,800\)
\end{tabular}

The normal profits for similar firms are ₹ 34,000 .
Record necessary entry for goodwill on retirement of \(U\).

\section*{Solution:}

\section*{Books of S, U and R Journal}
\begin{tabular}{|l|ll|l|l|l|}
\hline Date & \multicolumn{1}{|c|}{ Particulars } & L.F. & \begin{tabular}{c} 
Debit Amount \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Credit \\
Amount (₹)
\end{tabular} \\
\hline & S's Capital A/c & Dr. \\
\begin{tabular}{l} 
R's Capital A/c \\
To U's Capital A/c \\
\begin{tabular}{l} 
(Share of U's goodwill credited to his \\
capital A/c)
\end{tabular}
\end{tabular} & & 4,500 & \\
Dr.
\end{tabular}

Working Notes:
U's share of goodwill \(=₹ 18,000 \times \frac{2}{6}=₹ 6,000\)
Average profits \(=₹(36,600+43,600+48,800) / 3=₹ 43,000\)
Super profits \(=\) Average profits - Normal profits
\[
\text { = ₹ } 43,000-₹ 34,000=₹ 9,000
\]

Goodwill \(=\) Super profits \(\times\) No. of years purchase
\[
=₹ 9,000 \times 2=₹ 18,000
\]

\(S, M, U\) and \(R\) are partners sharing profits in ratio of \(3: 2: 3: 2\). On the retirement of U , goodwill was valued at ₹ \(1,20,000\). U's share of goodwill will be given to her by adjusting it into the capital accounts of S, M and R. Record necessary entry for the treatment of goodwill when new profit sharing ratio decided is \(3: 1: 6\).

\section*{Notes}

\section*{Self Assessment}

State whether the following statements are true or false:
6. Retiring partner's share of goodwill is debited to his/her capital account at the time of retirement.
7. Goodwill is recorded in the books only when it is purchased.
8. The retiring partner's capital account is debited with his/her share of goodwill and remaining partner's capital account is credited in their gaining ratio.
9. In case goodwill account is written off the capital account of all partners is credited.

\subsection*{5.3 Revaluation of Assets and Liabilities}

In case of retirement or death of a partner the assets and liabilities of the firm should be revalued in the same way as at the time of admission of a partner. At the time of retirement/death some of the assets or liabilities may not have been shown at their current values. To ascertain the net profit and loss on revaluation of assets and liabilities Revaluation A/c is prepared.

The following journal entries are passed for the revaluation of assets and liabilities:
(i) For increase in the value of Assets

Asset A/c
To Revaluation A/c
(Increase in the value of assets)
(ii) For decrease in the value of Asset

> Revaluation \(\mathrm{A} / \mathrm{c}\)
> To Asset \(\mathrm{A} / \mathrm{c}\)
> (Decrease in the value of assets)
(iii) For increase in the value of Liabilities

Revaluation A/c
Dr.
To Liabilities A/c
(Increase in the value of Liabilities)
(iv) For decrease in the value of Liabilities

Liabilities A/c
Dr.
To Revaluation A/c
(Decrease in the value of Liabilities)
(v) For unrecorded Assets

Asset A/c [unrecorded]
Dr.
To Revaluation A/c
(Unrecorded asset recorded at actual value)
(vi) For unrecorded Liability
Revaluation A/c
Dr.

To Liability A/c [unrecorded]
(Unrecorded Liability recorded at actual value)
(vii) For transfer of gain on revaluation:
Revaluation A/c
Dr.

To All Partner's Capital A/c (Old ratio)
(Profit on revaluation transferred to capital account in old profit sharing ratio)
(viii) For transfer of loss on revaluation:
All Partner's Capital
Dr.

To Revaluation A/c
(Loss on revaluation transferred to capital account in existing ratio)

E \(=\)Example: \(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profit in the ratio \(1: 2: 3\). X retires from the partnership. In order to settle his claim, the following revaluation of assets and liabilities was agreed upon:
(i) The value of Machinery is increased by ₹ 15,000 .
(ii) The value of Investment is increased by ₹ 2,000 .
(iii) A provision for outstanding bill standing in the books at ₹ 1,000 is now not required.
(iv) The value of Land and Building is decreased by ₹ 12,000 .

Give journal entries and prepare Revaluation account.

\section*{Solution:}
\begin{tabular}{|c|c|c|c|c|}
\hline Date & Particulars & L.F. & Debit Amount (₹) & Credit Amount (₹) \\
\hline \multirow[t]{3}{*}{} & \begin{tabular}{lc} 
Machinery A/c & Dr. \\
Investments A/c & Dr. \\
Provision for Outstanding Bill & Dr. \\
\multicolumn{1}{c}{ To Revaluation A/c } & \\
\begin{tabular}{l} 
(Increase in value of Assets and \\
reduction in provision)
\end{tabular} &
\end{tabular} & \multirow[t]{3}{*}{} & \[
\begin{array}{r}
\hline 15,000 \\
2,000 \\
1,000
\end{array}
\] & 18,000 \\
\hline & Revaluation A/c Dr.
To Land and Building A/c
(Decrease in value of assets) & & 12,000 & 12,000 \\
\hline & Revaluation A/c Dr.
To X's Capital A/c
To Y's Capital A/c
To Z's Capital A/c
(Profit on revaluation credited to all
partners capital A/c in old profit
sharing ratio i.e. \(1: 2: 3\) ) & & 6,000 & \[
\begin{aligned}
& 1,000 \\
& 2,000 \\
& 3,000
\end{aligned}
\] \\
\hline
\end{tabular}
\begin{tabular}{|c|c|l|c|}
\hline Particulars & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
(₹)
\end{tabular} \\
\hline Land and Building & 12000 & \begin{tabular}{l} 
Machinery \\
Profit transferred to: \\
X's capital 1000
\end{tabular} & \\
Investments & Provision for Outstanding Bill & 15000 \\
Y's capital 2000 & & & 1000 \\
Z's capital 3000 & 6000 & & \\
\cline { 2 - 2 } & 18000 & & 18000 \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
10. In case of retirement or death of a partner the \(\qquad\) of the firm should be revalued.
11. To ascertain the net profit and loss on revaluation of assets and liabilities \(\qquad\) is prepared.
12. At the time of retirement/death some of the assets or liabilities may not have been shown at their \(\qquad\) ....
13. The credit balance of Revaluation account shows \(\qquad\)

\subsection*{5.4 Accounting Treatment of Undistributed Profit}

At the time of retirement or death of a partner the amount of undistributed profits (losses), funds and reserves as shown in the Balance Sheet of the firm belongs to all the partners and is transferred to their capital accounts in old profit sharing ratio.

For the purpose, the following journal entries are recorded:
(i) For distribution of undistributed profit and reserve.
\begin{tabular}{ll} 
Reserves A/c & Dr. \\
Profit and loss A/c (Profits i.e. credit balance) & Dr.
\end{tabular}

To All partners' capital A/c (individually)
(Reserves and undistributed profit transferred to partner's capital \(\mathrm{A} / \mathrm{c}\) in old profit sharing ratio)
(ii) For distributing losses among all partners in the old ratio

All Partners, Capital A/c Dr.
To P\&L A/c (accumulated losses, i.e. debit balance)
To Deferred Revenue Expenditure A/c
The surplus available on some specific funds like workmen's compensation fund or investment fluctuation fund to meet certain obligations in future will be transferred to capital accounts of all the partners in their old ratio. For the purpose, the following journal entries are recorded:
\begin{tabular}{ll} 
Workman's Compensation Fund A/c & Dr. \\
Investment Fluctuation fund A/c & Dr. \\
To All Partners' capital A/c &
\end{tabular}
(Surplus available on workmen's compensation fund and investment fluctuation fund transferred to partner's capital \(\mathrm{A} / \mathrm{c}\) in old profit sharing ratio)


Example: \(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profits in proportion of \(3: 2: 1\). X decides to retire form the partnership. On the date of her retirement, firm's abstract Balance Sheet was as under. Pass the necessary entry to treat the profit and loss \(\mathrm{A} / \mathrm{c}\) in balance sheet.

Balance Sheet \(\qquad\) as at \(\qquad\)
\begin{tabular}{|lr|r|l|r|}
\hline \multicolumn{2}{|c|}{ Liabilities } & \multicolumn{1}{c|}{ Amount (₹) } & \multicolumn{1}{c|}{ Assets } & \multicolumn{1}{c|}{ Amount (₹) } \\
\hline Capitals : & & & Cash & 14,000 \\
X & 10,000 & & Profits and Loss & 6,000 \\
Y & 6,000 & 20,000 & & \\
Z & 4,000 & & & \\
& & 20,000 & & 20,000 \\
\hline
\end{tabular}

\section*{Solution:}

Books of \(\mathrm{X}, \mathrm{Y}\) and Z
\begin{tabular}{|l|ll|l|l|l|}
\hline Date & \multicolumn{1}{|c|}{ Particulars } & L.F. & \begin{tabular}{c} 
Debit \\
Amount (₹)
\end{tabular} & \begin{tabular}{c} 
Credit \\
Amount (₹)
\end{tabular} \\
\hline & \begin{tabular}{ll} 
X's Capital A/c & Dr. \\
Y's Capital A/c & \\
\begin{tabular}{ll} 
Z's capital A/c \\
To profit and loss A/c & Dr.
\end{tabular} & \\
(Loss of ₹ 6,000 divided among all \\
partners in their profit sharing ratio \\
i.e. 3:2:1)
\end{tabular} & & 2000 & \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
14. At the time of retirement or death of a partner the amount of undistributed profits (losses), funds and reserves as shown in the Balance Sheet of the firm belongs to all the partners and is transferred to their capital accounts in \(\qquad\) profit sharing ratio.
15. The \(\qquad\) available on some specific funds will be transferred to capital accounts of all the partners in their old ratio.

\subsection*{5.5 Summary}
- Section 32 clearly comprehends a situation where a partner may retire without dissolving the firm.
- As soon as a partner retires the profit sharing ratio of the continuing partners get changed.
- At the time of retirement or death of a partner, the share of retiring/deceased partner is acquired by existing partners, on the basis of agreement among them.
- The ratio in which retiring partner's share is distributed amongst continuing partners' is known as "gaining ratio".

Notes - At the time of retirement or death of a partner the retiring partner is entitled to his share of goodwill.
- If the firm has agreed to settle the account of retiring/deceased partner by paying him a lump-sum amount, then amount paid to him in excess of his capital and share in reserves/ revaluation account etc. shall be treated as his share of goodwill.
- In case of retirement or death of a partner the assets and liabilities of the firm should be revalued in the same way as at the time of admission of a partner.
- At the time of retirement or death of a partner the amount of undistributed profits (losses), funds and reserves as shown in the Balance Sheet of the firm belongs to all the partners and is transferred to their capital accounts in old profit sharing ratio.

\subsection*{5.6 Keywords}

Gaining Ratio: The ratio in which retiring partner's share is distributed amongst continuing partners' is known as "gaining ratio".

Hidden Goodwill: If the firm has agreed to settle the account of retiring/deceased partner by paying him a lump-sum amount, then amount paid to him in excess of his capital and share in reserves/revaluation account etc. shall be treated as his share of goodwill.

Revaluation \(A / c\) : For revaluation of assets and recording of unrecorded assets and for the reassessment of liabilities and recording of unrecorded liabilities the firm prepares an account in its book called Revaluation Account.

\subsection*{5.7 Review Questions}
1. Define gaining ratio.
2. Explain the accounting treatment of goodwill on retirement of a partner.
3. \(A, B\) and \(C\) were partners in a firm sharing profit in the ratio of \(7: 6: 7\). B retired and his share was divided equally between A and C . Calculate the new profit sharing ratio of A and C .
4. Madhu, Surabhi and Nikhil are partners without any partnership deed. Madhu retire, calculate future ratio of continuing partners if they agreed to acquire her share (i) in the ratio \(5: 3\) (ii) equally. Also mention their gaining ratio.
5. \(\mathrm{A}, \mathrm{B}\) and C are partners in a firm sharing profits in the ratio of \(2: 1: 1\). They took out a policy in 2002 of ₹ \(1,40,000\). On 21st March, 2003 B die. The surrender value of the policy appearing in the books on that date was ₹ 20,000 . Record necessary journal entries to close the joint life policy in the year of death of B, if premium paid was treated (i) as business expenses and (ii) as an asset.
6. Rita, Puneeta and Gita are partners sharing profits in the ratio of \(1: 2: 3\). Rita retires on the date of balance sheet on the following terms:
(a) A computer costing ₹ 40,000 which was not recorded earlier, to be recorded now.
(b) A liability of compensation towards an employee for ₹ 16,000 has also been finalised for payment.

Record necessary entries to record the above arrangement.
7. \(R, S\) and \(M\) were carrying on business in partnership sharing profits in the ratio of \(3: 2: 1\), respectively. On March 31, 1999, Balance Sheet of the firm stood as follows:

Balance Sheet as at March 31, 1999
\begin{tabular}{|lr|r|l|r|}
\hline Liabilities & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & Assets & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Sundry Creditors & & 16,000 & Building & 23,000 \\
Capitals : & & Debtors & 7,000 \\
R & 20,000 & & Stock & 12.000 \\
S & 7.500 & & Patents & 8.000 \\
M & \(\underline{12,500}\) & 40,000 & Bank & 6,000 \\
\hline & & \(\mathbf{5 6 , 0 0 0}\) & & \(\mathbf{5 6 , 0 0 0}\) \\
\hline
\end{tabular}

Shyam retired on the above mentioned date on the following terms:
(i) Buildings to be appreciated by ₹ 8,800 .
(ii) Provision for bad debts be made @ \(5 \%\) on debtors.
(iii) Goodwill of the firm be valued at ₹ 9,000 .
(iv) ₹ 5,000 be paid to \(S\) immediately and the balance due to him treated as a loan carrying interest @ 6\% per annum.

Record necessary journal entries and prepare the balance sheet of the reconstituted firm.
8. The Balance Sheet of A, B and C who were sharing the profits in proportion to their capitals stood as on March 31, 2003.

Balance Sheet as at March 31, 1999
\begin{tabular}{|l|r|l|c|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & \multicolumn{1}{|c|}{ Assets } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Bills Payable & 6,250 & Land and Building & 12,000 \\
Sundry Creditors & 10,000 & Customers 10,500 & \\
Reserve Funds & 2,750 & Less Reserve \(\quad 500\) & 10,000 \\
Capitals : & & Bills Receivable & 7,000 \\
A & 20,000 & & Stock \\
B & 15,000 & & Plant and Machinery \\
C & \(\underline{15,000}\) & 50,000 & Bank Balance \\
\hline & & \(\mathbf{6 9 , 0 0 0}\) & \\
\hline
\end{tabular}

B retired on the date of balance sheet and the following adjustments were made:
(a) Stock was depreciated by \(10 \%\).
(b) Factory building were appreciated by \(12 \%\).
(c) Reserve for doubtful debts be created up to 5\%
(d) Reserve for legal charges to be made at ₹ 265 .
(e) The goodwill of the firm fixed at ₹ 10,000 .
(f) The capital of the new firm be fixed at ₹ 30,000 . The continuing partners decide to keep their capitals in the new profit sharing ratio of \(3: 2\).

Record journal entries and prepare the initial balance sheet of reconstituted firm after transferring the balance in B's capital account to his loan account.

Notes 9. Distinguish between sacrificing and gaining ratio.
10. Why do firms revalue assets and reassess their liabilities on retirement or on the event of death of a partner?

\section*{Answers: Self Assessment}
1. Section 32
2. Existing
3. "Gaining ratio"
5. Old share
7. True
4. Profit sharing ratio
6. False
9. False
8. False
11. Revaluation a/c
10. Assets and liabilities
13. Profit
12. Current values
14. Old
15. Surplus

\subsection*{5.8 Further Readings}

Books
I.M. Pandey, Financial Management, Vikas Publishing, New Delhi.

Khan and Jain, Management Accounting.
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Prasanna Chandra, Financial Management - Theory and Practice, Tata McGraw Hill, New Delhi (1994).
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S. Bhat, Financial Management, Excel Books, New Delhi.
S.N. Maheswari, Management Accounting.
V.K. Goyal, Financial Accounting, Excel Books, New Delhi.
www.futureaccountant.com

\section*{Unit 6: Settlement of Retiring Partner's Claim}
CONTENTS
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Introduction
6.1 Computation of Partner's Interest
6.2 Mode of Payment
6.2.1 Payment in Lump Sum
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\section*{Objectives}

After studying this unit, you will be able to:
- Compute retiring partner's interest
- Illustrate the lump sum and instalment methods of claim settlement

\section*{Introduction}

In the last unit you learnt about the key adjustments required at the time of retirement of a partner. The current unit discussed about the computation of retiring partner's claim for settlement of his/her account. The key methods used for claim settlement are lump sum and instalment method. The claim of the retiring or deceased partner usually consists of his capital as on the date of retirement or death less drawings (if any) plus his share of goodwill in the firm plus his share in the accumulated profits of the firm (if any) less his share of accumulated loss (if any) plus (minus) his share in the profit (loss) and revaluation of assets and liabilities of the firm and such other things. The outgoing partner's account is settled as per terms of partnership deed, i.e. in lump sum immediately or in various installments with/without interest as agreed or partly cash immediately and partly in installments at the agreed intervals.

\subsection*{6.1 Computation of Partner's Interest}

When a partner retires from business, his claim against the firm is determined by preparing his capital account incorporating therein all the adjustments in respect of his share of goodwill, accumulated profits or losses, profit/loss on revaluation of assets and liabilities, etc. Now the settlement of the claim depends on the provisions of the partnership deed. If nothing is given in the problem to be solved in respect of settlement of claim, the amount of claim is usually transferred to the Retiring partner's Loan Account for which the following entry is passed:

Notes Retiring Partner's Capital A/c Dr
To Retiring Partner's Loan A/c
\begin{tabular}{|c|c|}
\hline Particulars & \\
\hline \multicolumn{2}{|l|}{(A) Items to added} \\
\hline - The credit balance of Capital Account & -------- \\
\hline - His/her share in the Goodwill of the firm & \\
\hline - His/her share in the Revaluation Profit & -------- \\
\hline - His/her share in General Reserve and Accumulated Profit & ------- \\
\hline - Interest on Capital & \\
\hline \multicolumn{2}{|l|}{Total} \\
\hline \multicolumn{2}{|l|}{(B) Items to be Deducted} \\
\hline - His/her share in the Revaluation loss & ----- \\
\hline - His/her Drawings and Interest on Drawings up to the date of retirement & \\
\hline - His/her share of any accumulated losses & ---- \\
\hline - Loan taken from the firm & ---- \\
\hline Total & \\
\hline Retiring Partner's Interest (A - B) & -------- \\
\hline
\end{tabular}

Example:
\(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profits in the ratio of \(2: 2: 1\) respectively. Their balance sheet as on December 2010 was as follows:
\begin{tabular}{|l|r|l|c|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \multicolumn{1}{c|}{ Amount (₹) } & \multicolumn{1}{c|}{ Assets } & Amount (₹) \\
\hline Bills Payable & 16,000 & Cash at Bank & 68,000 \\
Sundry Creditors & 42,000 & Bills Receivable & 10,000 \\
Loan from X & \(1,00,000\) & Sundry Debtors & 30,000 \\
Reserve Fund & 20,000 & Stock & 45,000 \\
Capitals : & & Furniture & 10,000 \\
X & & Machinery & 60,000 \\
Y & & Buildings & 80,000 \\
Z & 50,000 & & Goodwill \\
& & & \\
\hline & & & 12,000 \\
\hline & & \(3,15,000\) & \\
\hline
\end{tabular}

Z retires from business as on January 1, 2010. For the purpose of retirement of Z, the assets and liabilities of the firm are revalued as follows:
(i) Stock \(20 \%\) less; Furniture at ₹ 6,000
(ii) Machinery at \(75 \%\) of book value
(iii) Building at ₹ \(1,60,000\)
(iv) A provision of \(10 \%\) is to be made for doubtful debts
(v) The goodwill of the firm is estimated to be worth ₹ 60,000
(vi) A bill for repairs of building ₹ 8,000 was unpaid and was not recorded in the books.

Ascertain the claim of Z against the firm by preparing his Capital Account.

\section*{Solution:}
1. Preparation of Revaluation \(A / c\)

Revaluation A/c
\begin{tabular}{|c|c|c|c|}
\hline Particulars & Amount (₹) & Particulars & Amount (₹) \\
\hline To Stock & 9,000 & \multirow[t]{11}{*}{By Building} & \multirow[t]{10}{*}{80,000} \\
\hline To Furniture & 4,000 & & \\
\hline To Machinery & 15,000 & & \\
\hline To Provision for, Doubtful & & & \\
\hline Debts & 3,000 & & \\
\hline To Outstanding Repair & 8,000 & & \\
\hline To Capital a/c (Share of profit) & & & \\
\hline \(\mathrm{X}-2 / 5 \quad 16,400\) & & & \\
\hline Y - 2/5 16,400 & & & \\
\hline Z-1/5 8,200 & 41,000 & & \\
\hline & 80,000 & & 80,000 \\
\hline
\end{tabular}
2. Calculation of Z's share of Goodwill: Goodwill of the firm is estimated to be ₹ 60,000 . But in the Balance Sheet of the firm is already showing the goodwill at ₹ 12,000 . Hence, it should be increased by ₹ 48,000 and the amount should be credited to all the three partners in their profit' sharing ratios. Hence \(Z^{\prime}\) 's share of goodwill is \(48,000 \times 1 / 5=9,600\).
3. Z's share of Reserve Fund: There is a Reserve Fund of \(₹ 20,000\) in the Balance Sheet which represents accumulated profits. \(Z\) 's share is \(20,000 \times 1 / 5=4,000\).
4. Preparation of Z 's capital \(\mathrm{A} / \mathrm{c}\)
\begin{tabular}{|l|c|l|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & \multicolumn{1}{|c|}{ Particulars } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline T o Z's Loan A/c & 48,000 & By Revaluation A/c & 8,200 \\
& & By Goodwill A/c & 9,600 \\
& & By Reserve Fund & 4,000 \\
& & By Balance & 27,000 \\
\hline & 48,000 & & 48,000 \\
\hline
\end{tabular}

Notes As nothing is given in the questions as regards the settlement of the claim, the amount due to Z on his retirement is transferred to his Loan Account.

\section*{Notes \\ Self Assessment}

Fill in the blanks:
1. The settlement of the claim depends on the provisions of the \(\qquad\)
2. If nothing is given in the problem to be solved in respect of settlement of claim, the amount of claim is usually transferred to the Retiring partner's \(\qquad\) ....
3. The retiring partners' claim consists the \(\qquad\) balance of Capital Account.
4. The retiring partner's share of accumulated losses should be \(\qquad\) in settling his/her claim.
5. While computing the retiring partners' claim the amount of drawings should be \(\qquad\)

\subsection*{6.2 Mode of Payment}

The outgoing partner's account is settled as per terms of partnership deed, i.e. in lump sum immediately or in various installments with/without interest as agreed or partly cash immediately and partly in installments at the agreed intervals.

\subsection*{6.2.1 Payment in Lump Sum}

If the full amount of claim is payable to the retiring partner on the date of retirement as per agreement, the amount will not be transferred to Loan Account but will be paid in cash or by cheque.

The following journal entry is made for disposal of-the amount payable to the retiring partner:
\[
\begin{array}{cl}
\text { Retiring Partner's Capital A/c } & \text { Dr. } \\
\text { To Cash/Bank A/c } \\
\text { (Amount paid to the retiring partner) }
\end{array}
\]


Example: Ram, Shyam and Mohan are partners sharing profit in the ratio of \(3: 2: 1\). Their balance sheet as on December 31st 2006 is as under:

Balance sheet as on December 31st, 2006
\begin{tabular}{|c|c|c|c|}
\hline Liabilities & Amount (₹) & Assets & Amount ( \(\mathrm{Y}^{\text {) }}\) \\
\hline Creditors & 80,000 & Building & 1,80,000 \\
\hline Bills Payable & 26,000 & Plant & 1,40,000 \\
\hline General reserve & 24,000 & Motor Car & 40,000 \\
\hline Capital : & & Stock & 1,00,000 \\
\hline Ram 1,60,000 & & Debtors 63,000 & \\
\hline Shyam 1,20,000 & & Less Provision for Bad debts 3,000 & \\
\hline Mohan 1,20,000 & 4,00,000 & Cash at Bank & 60,000 \\
\hline & & & 10,000 \\
\hline & 5,30,000 & & 5,30,000 \\
\hline
\end{tabular}

Shyam retires on that date on the following terms:
(a) The Goodwill of the firm is valued at ₹ 60,000 .
(b) Stock and Building to be appreciated by \(10 \%\).
(c) Plant is depreciated by \(10 \%\).
(d) Provision for Bad debts is increased up to ₹ 5,000 .
(e) Shyam's share of goodwill adjusted through remaining partners capital account.

The amount due to Shyam is paid out of the fund brought in by Ram and Mohan for that purpose in their new profit sharing ratio. Shyam is paid full amount.
Prepare Revaluation Account and Partner's Capital account.

\section*{Solution:}

Suppose the gaining ratio of Ram and Mohan will remains \(3: 1\).
(a) Gaining ratio \(=3: 1\).

Ram gets \(=2 / 6 \times 3 / 4=1 / 4\)
Ram's new share \(=3 / 6+1 / 4=3 / 4\)
Mohan gets \(2 / 6 \times 1 / 4=1 / 12\)
Mohan's new share \(=1 / 6+1 / 12=3 / 12=1 / 4\)
New profit sharing ratio between Ram and Mohan is
\(=3 / 4: 1 / 4\)
\(=3: 1\).
(b) Shyam' Share of goodwill
\(60,000 \times 2 / 6=20,000\)
The following journal entry will be passed for goodwill:
\begin{tabular}{llr} 
Ram's Capital A/c & Dr. & 15,000 \\
Mohan's Capital A/c & Dr. & 5,000
\end{tabular}

To Shyam's Capital A/c
20,000
(Shyam's share of goodwill debited to remaining partners' capital A/c)
Revaluation \(\mathrm{A} / \mathrm{c}\)
\begin{tabular}{|c|c|c|c|}
\hline Particulars & Amount (₹) & Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline Provision for Bad debts & 2,000 & Stock & 10,000 \\
\hline Plant & 14,000 & Building & 18,000 \\
\hline Profit transferred to & & & \\
\hline Capital Accounts: & & & \\
\hline Ram 6,000 & & & \\
\hline Shyam 4,000 & & & \\
\hline Mohan 2,000 & 12,000 & & \\
\hline & 28,000 & & 28,000 \\
\hline
\end{tabular}

Dr.
Cr.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Particulars & \begin{tabular}{l}
Ram \\
(₹)
\end{tabular} & \begin{tabular}{l}
Shyam \\
(₹)
\end{tabular} & \begin{tabular}{l}
Mohan \\
(₹)
\end{tabular} & Particulars & \begin{tabular}{l}
Ram \\
(₹)
\end{tabular} & \begin{tabular}{l}
Shyam \\
(₹)
\end{tabular} & \begin{tabular}{l}
Mohan \\
(₹)
\end{tabular} \\
\hline \begin{tabular}{l}
Capital \\
Bank
\end{tabular} & 15,000 & 1,52,000 & 5,000 & Balance b/d General & 1,60,000 & 1,20,000 & 1,20,000 \\
\hline \multirow[t]{6}{*}{Balance c/d} & 2,77,000 & ------ & 1,59,000 & Reserve & 12,000 & 8,000 & 4,000 \\
\hline & & & & \begin{tabular}{l}
Revaluation \\
(Profit)
\end{tabular} & 6,000 & 4,000 & 2,000 \\
\hline & & & & \begin{tabular}{l}
Ram Capital \\
Mohan
\end{tabular} & ----- & 15,000 & \\
\hline & & & & Capital & ----- & 5,000 & ----- \\
\hline & & & & Bank & 1,14,000 & & 38,000 \\
\hline & 2,92,000 & 1,52,000 & 1,64,000 & & 2,92,000 & 1,52,000 & 1,64,000 \\
\hline
\end{tabular}

\subsection*{6.2.2 Payment in Installments}

In this case the amount due to retiring partner is paid in installments. In the absence of any agreement, section 37 of the Indian Partnership Act, 1932 is applicable.


As per the Sec 37 of Indian Partnership Act, 1932, outgoing partner is at liberty to receive either interest @ \(6 \%\) p.a. till the date of payment or the share of profits which has been earned with his money.

An instalment consists of two parts:
(i) Principal Amount of instalment due to retiring partner.
(ii) Interest at an agreed rate.

Interest due on loan amount is credited to retiring partners' loan account. Instalment inclusive of interest then is paid to the retiring partner as per schedule agreed upon.
(i) On part payment in cash and balance transferred to his/her loan account.

> Retiring Partner's Capital A/c

Dr.
To Cash/Bank A/c
To Retiring Partner's Loan A/c
(Part payment made and balance transferred to loan \(\mathrm{A} / \mathrm{c}\) )
(ii) Total amount due transferred to loan \(\mathrm{A} / \mathrm{c}\)

> Retiring Partner's Capital A/c Dr.

To Retiring Partner's Loan A/c
(Total amount due transferred to loan \(\mathrm{A} / \mathrm{c}\) )
(iii) For interest due
\[
\begin{aligned}
& \quad \text { Interest on loan } \mathrm{A} / \mathrm{c} \\
& \text { To Retiring Partners' Loan } \mathrm{A} / \mathrm{c} \\
& \text { (Interest due on loan) }
\end{aligned}
\]
(iv) For payment of instalment
\[
\begin{array}{cc}
\text { Retiring Partners' Loan A/c } & \text { Dr. } \\
\text { To Cash/Bank A/c } & \\
\text { (Instalment inclusive of interest paid) } &
\end{array}
\]

E \(=\)
Example: Taking the figures of the pervious example, assuming that he is paid \(40 \%\) of the amount due immediately and the balance in three equal yearly installments. The interest payable is \(12 \%\) p.a.

\section*{Solution:}
\begin{tabular}{rl} 
The amount due to Mohan & \(=₹ 1,52,000\) \\
Amount paid immediately & \(=₹ 1,52,000 \times 40 / 100\) \\
& \(=₹ 60,800\) \\
Amount of three equal installments & \(=₹ 1,52,000-₹ 60,800 \times 3\) \\
& \(=₹ 91,200 \div 3=₹ 30,400\) \\
1st Instalment at the end of 1st Year & \(=₹ 30,400+₹ 10,944\) \\
& \(=₹ 41,344\) \\
Interest @ 12\% pa. & \(=₹ 91,200 \times 12 / 100\) \\
& \(=₹ 10,944\) \\
2nd Instalment at the end of 2nd Year & \(=₹ 30,400+₹ 7,296\) \\
& \(=₹ 37,344\) \\
Interest @ 12\% pa. & \(=₹ 60,800 \times 1.2 / 100\) \\
& \(=₹ 7,296\) \\
3rd Instalment at the end of 3rd Year & \(=₹ 30,400+₹ 3,648\) \\
& \(=₹ 34,048\) \\
Interest @ 12\% pa. & \(=₹ 30,400 \times 12 / 100\) \\
&
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
6. If the full amount of claim is payable to the retiring partner on the date of retirement as per agreement, the amount will not be transferred to Loan Account but will be paid in
7. In the absence of any agreement, \(\qquad\) of the Indian Partnership Act, 1932 is applicable.
8. Section 37 of the Indian Partnership Act says that outgoing partner is at liberty to receive either interest @ \(\qquad\) p.a. till the date of payment or the share of profits which has been earned with his money.
9. An \(\qquad\) consists of two parts, Principal Amount of instalment due to retiring partner and Interest at an agreed rate.
10. Interest due on loan amount is credited to retiring partners' \(\qquad\)

Prepare the Proforma of capital account with a suitable example.

\subsection*{6.3 Summary}
- The outgoing partner's account is settled as per terms of partnership deed, i.e. in lump sum immediately or in various installments with/without interest as agreed or partly cash immediately and partly in installments at the agreed intervals.
- When a partner retires from business, his claim against the firm is determined by preparing his capital account incorporating therein all the adjustments in respect of his share of goodwill, accumulated profits or losses, profit/loss on revaluation of assets and liabilities, etc.
- If nothing is given in the problem to be solved in respect of settlement of claim, the amount of claim is usually transferred to the Retiring partner's Loan Account.
- If the full amount of claim is payable to the retiring partner on the date of retirement as per agreement, the amount will not be transferred to Loan Account but will be paid in cash or by cheque.
- In the absence of any agreement, section 37 of the Indian Partnership Act, 1932 is applicable, which says that outgoing partner is at liberty to receive either interest @ \(6 \%\) p.a. till the date of payment or the share of profits which has been earned with his money.
- An instalment consists of two parts:
(i) Principal Amount of instalment due to retiring partner.
(ii) Interest at an agreed rate.
- Interest due on loan amount is credited to retiring partners' loan account.
- Instalment inclusive of interest then is paid to the retiring partner as per schedule agreed upon.

\subsection*{6.4 Keywords}

Annuity: Annual Payment of the claim of a retiring or deceased partner.
Executors: The representatives of the deceased partner who are entitled to claim a his share.
Gaining Ratio: The ratio of the continuing partners inter se which has been purchased by them from the retiring or deceased partner.

\subsection*{6.5 Review Questions}
1. List the various claims of retiring partner.
2. Illustrate the methods of settling the claims of retiring partner.
3. A retires from business on 1st January, 2004. His total claim against the firm works out to ₹ 91,000 on that date. The partners have agreed to allow \(20 \%\) interest on the unpaid balance per annum and settle his claim in three equal annual installments including interest. Prepare A's Loan Account.
4. Calculate the total amount due to \(X\), who is retiring from the partnership:
- \(\quad\) Credit balance in X capital account ₹ 50,000 .
- X's share of goodwill ₹ 5,000
- \(\quad\) General reserve balance shown in Balance sheet ₹ 10,000
- Profit on Revaluation of Assets/liabilities ₹ 3,000
- Interest on drawings ₹ 500 .
- \(\quad X\) share in the profit of the firm \(2 / 3\)
5. Illustrate the lump sum payment method for settling the claims of retiring partner.
6. A, B and C were partners in a firm. A retired from business on 31st December; 2004 His total claim against the firm on his retirement works out to be ₹ 59,500 . It is agreed amongst the partners that the total amount payable to the retired partner should be transferred to his loan account carrying interest @ \(12.5 \%\) p.a. It is also agreed that a sum of ₹ 9,500 be paid to the retiring partner immediately on \(1^{\text {st }}\) January, 2005 and balance in five equal annual installments payable at the end of each of the next five years on 31st December, plus interest !he first of such payment to be made on 31st December, 2005. Show the Retired Partner's Loan Account for the five years from 2005 to 2009.
7. Ashu, Ashmita and Metu are partners sharing profits in the ratio of \(4: 3: 2\). Ashu retires, assuming Ashmita and Metu will share profits in future in the ratio \(5: 3\), determine the gaining ratio.

\section*{Answers: Self Assessment}
1. Partnership deed
3. Credit
5. Deducted
7. Section 37
9. Instalment
2. Loan Account
4. Deducted
6. Cash or by cheque
8. \(6 \%\)
10. Loan account

\subsection*{6.6 Further Readings}

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\section*{Objectives}

After studying this unit, you will be able to:
- Illustrate the accounting treatment on death of a partner
- Compute the share of profit up to the death of the partner
- Record the transactions for settlement of executor's \(\mathrm{A} / \mathrm{c}\)

\section*{Introduction}

Partnership stands dissolved on the death of a partner. The rights of the legal representatives of the deceased partner depend on the provisions of the partnership deed. The claim of the deceased partner is determined as per the provisions of the partnership deed which is normally purchased by the surviving partners and they continue to carry on the business as usual. The claim of the deceased partner is either paid immediately or transferred to Loan Account in the name of his legal representatives. The claim is usually determined on the same basis as that of a retired partner taking into account his share in the accumulated profits of the firm, goodwill, profit/ loss on revaluation of assets/liabilities and so on

\subsection*{7.1 Accounting Treatment on Death of a Partner}

The key difference between the retirement and death of partner is that normally the retirement takes place at the end of an accounting period whereas death can occur at any time. Hence, in the case of death of a partner his claim shall include:
- share in the profits of the firm up to the date of death
- interest on his capital up to the date of death
- share in the proceeds of joint life policy (if any) in addition to his share in the accumulated
- goodwill, etc.

Caution Section 37 of the Partnership Act provides that if the amount is not paid immediately, the executors of the deceased partner would be entitled, at their choice, to receive interest @ \(6 \%\) p.a. from the date of death to the date of actual payment or a share in the profits of the firm earned during that period in the proportion in which the amount due to the deceased partner bears to the total capital employed. This section is also applicable in the case of retirement of a partner.
On the death of a partner, the accounting treatment regarding goodwill, revaluation of assets and reassessment of liabilities, accumulated reserves and undistributed profit are similar to that of the retirement of a partner.

Notes The deceased partners' claim consists of:


\section*{Self Assessment}

Fill in the blanks:
1. The claim of the deceased partner is either paid immediately or transferred to Loan Account in the name of his \(\qquad\)
2. The rights of the legal representatives of the deceased partner depend on the provisions of the \(\qquad\)

Notes 3. The key difference between the retirement and death of partner is that normally the
\(\qquad\) takes place at the end of an accounting period whereas \(\qquad\) can occur at any time.
4. Share of Joint Life Policy should be \(\qquad\) in deceased partner's capital A/c.

\subsection*{7.2 Ascertainment of Share of Profit Up to the Death of Partner}

If the death of a partner occurs during the year, the representatives of the deceased partner are entitled to his/her share of profits earned till the date of his/her death. Such profit is ascertained by any of the following methods:
- Time Basis
- Turnover or Sales Basis

\subsection*{7.2.1 On the Basis of Time}

There are two methods used in ascertainment of profit on the basis of tome:
1. On the basis of average profit of certain years: Under this method the calculation of profit is based on the average annual profit for the past few years say, 3 to 5 years. Then, the profit for the proportionate period is found out.

\(=E\)
Example: \(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profits equally. Z dies on April 30, 2004. The accounts of the firm are closed on Dec. 31. The profits for the past 3 years are: 2001-₹ 35,000; 2002 - ₹ 40,000 and 2003-₹ 60,000 . Calculate the Z's share of profit from \(1^{\text {st }}\) April to \(30^{\text {th }}\) April 2004.

\section*{Solution:}

The average profit for the past three years:
\[
\frac{₹ 35,000+₹ 40,000+₹ 60,000}{3}=₹ 45,000
\]

Profit for 4 months up to April 30, \(2004=4 / 12 \times 45,000=₹ 15,000\)
Z's share of Profit = ₹ \(15,000 \times 1 / 3=₹ 5,000\)
2. On the basis of last year's profit: Calculation of profit is based on the last year's profit.


Example: The total profit of previous year is ₹ 360000 and a partner dies three months after the close of previous year, the profit of three months is;
\(=₹ 360000 \times 3 / 12=₹ 90000\)
If the deceased partner took \(2 / 10\) share of profit, his/her share of profit till the date of death is \(₹ 90000 \times 2 / 10=₹ 18000\).

\subsection*{7.2.2 On the Basis of Turnover}

Under this method, the share of profit is calculated on the basis of the profit and the total sales of the last year. Thereafter, the profit up to the date of death is estimated on the basis of the sale of the last year.

Caution Profit is assumed to be earned uniformly at the same rate.

Example: A, B and C are partners sharing profits and losses in the ratio of \(2: 1: 1\). B dies on March 1, 2004. Sales for the year 2004 amount to ₹ 80,000 , out of which ₹ 25,000 are for a period from January 1, 2004 to March 1, 2004. The profit for the year are ₹ 40,000.

Calculate the B's share of profit.

\section*{Solution:}

The Profit up to the date of B's death
\[
=\frac{₹ 25,000}{₹ 80,000} \times ₹ 40,000=₹ 12,500
\]

B's share \(=12,500 \times 1 / 4=₹ 3,125\)

\(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profits in the ratio of \(3: 2: 1\). Z dies on 31st May 2006. Sales for the year 2005-2006 amounted to ₹ \(4,00,000\) and the profit on sales is ₹ 60,000 . Accounts are closed on 31 March every year. Sales from lst April 2006 to 31st May 2006 is ₹ \(1,00,000\).

Calculate the deceased partner's share in the profit up to the date of death.

\section*{Self Assessment}

Fill in the blanks:
5. The Executor is entitled to all the right of a \(\qquad\)
6. Share of goodwill of the deceased partner is \(\qquad\) to his capital account.
7. In case of death of a partner, the profit may be estimated on the basis of \(\qquad\) and
\(\qquad\)
8. The balance in the capital account of the deceased partner is transferred to his \(\qquad\) account.
9. Interest on drawing due from deceased partner till the date of the death is \(\qquad\) to his capital account.
10. Under \(\qquad\) method the calculation of profit is based on the average annual profit for the past few years say, 3 to 5 years.
11. The profit can be calculated on the basis of \(\qquad\)
12. Under \(\qquad\) the share of profit is calculated on the basis of the profit and the total sales of the last year.

\section*{Notes \\ 7.3 Settlement of Executor's Account}

After the death of a partner the total amount due to him is transferred to his, executor's account and paid off as per the provisions of the partnership deed immediately or in installments together with interest on the unpaid balance. As explained earlier the amount due to the deceased partner should include the amount standing to the credit of his Capital Account, a share in the accumulated profits, goodwill, joint life policy (if any), profit on revaluation of assets/liabilities, etc.

The following entries should be passed for disposal of amount due to the deceased partner:
(a) The amount standing to the credit of deceased partner's capital is transferred to his executor's account, by recording the following entry:

Deceased partner's capital A/c Dr
To Deceased partner's executor's A/c
Deceased partner's executor's account will be settled as per the agreement between the firm and executor's of the deceased partner.
(b) When the full amount is paid in cash, following entry is recorded:
\[
\begin{array}{cc}
\text { Executor's A/c } & \text { Dr } \\
\text { To Cash/Bank A/c } &
\end{array}
\]
(c) When the settlement is made in installments, the following entries are made:
(i) For interest due:

Interest on executor's A/c Dr
To Executor's A/c
(ii) For payment of instalment on loan account

Executor's A/c Dr
To Cash/Bank A/c

Example: Nutan, Sumit and Shiba are partners in a firm sharing profits in the ratio \(5: 3: 2\). On 31st December 2006 their Balance Sheet was as under:
\begin{tabular}{|l|r|l|c|}
\hline Liabilities & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & Assets & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Creditors & 52,000 & Building & 60,000 \\
Reserve Fund & 15,000 & Plant & 50,000 \\
Capitals : & & Stock & 27,000 \\
Nutan & & Debtors & 25,000 \\
Sumit & 40,000 & & Cash \\
Shiba & 45,000 & & 10,000 \\
& 30,000 & \(1,35,000\) & Bank
\end{tabular}

Nutan died on 1 July 2007. It was agreed between her executor and the remaining partners that:
(i) Goodwill to be valued at \(2^{1 ⁄ 2}\) years purchase of the average profits of the last Four years, which were: 2003 ₹ 25,000 ; 2004 ₹ 20,000 ; 2005 ₹ 40,000 and 2006 ₹ 35,000 .
(ii) Building is valued at ₹ 70,000 ; Plant at ₹ 46,000 and Stock at ₹ 32,000 .
(iii) Profit for the year 2006 be taken as having accrued at the same rate as that of the previous year.
(iv) Interest on capital is provided at \(9 \%\) p.a.
(v) On 1 July 2007 her drawings account showed a balance of ₹ 20,000.
(vi) ₹ 25,950 are to be paid immediately to her executor and the balance is transferred to her Executors Loan Account.

Prepare Nutan's Capital Account and Nutan's Executor's Account as on 1 \({ }^{\text {st }}\) July 2007.

\section*{Solution:}
(i) Valuation of Goodwill:
\[
\begin{aligned}
\text { Total Profit } & =₹ 25,000+₹ 20,000+₹ 40,000+₹ 35,000 \\
& =₹ 1,20,000
\end{aligned}
\]

Average Profit \(=1,20,000 / 4=₹ 30,000\)
Hence, Goodwill at \(2^{1 ⁄ 2}\) year's purchase \(=₹ 30,000 \times 2^{1 ⁄ 2} 2=₹ 75,000\)
Nutan's share of goodwill \(=75,000 \times 5 / 10=₹ 37,500\)
It is adjusted into the Capital Accounts of Sumit and Shiba in the gaining ratio of \(3: 2\) i.e. ₹ 22,500 and ₹ 15000 respectively.
(ii) Share of Profit payable to Nutan [up to the date of death]
\[
\begin{aligned}
& =₹ 35,000 \times 6 / 12 \times 5 / 10 \\
& =₹ 8,750
\end{aligned}
\]
(iii) Nutan's Share of Reserve Fund \(=₹ 15,000 \times 5 / 10\)
= ₹ 7,500
(iv) Interest on Nutan's Capital \(=60,000 \times 9 / 100 \times 6 / 12\)
= ₹ 2,700

Revaluation Account
Dr
\begin{tabular}{|ll|c|l|r|}
\hline Particulars & & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & Particulars & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Plant & & 4,000 & Building & 10,000 \\
Profit transferred to & & & Stock & 5,000 \\
Nutan Capital & 5,500 & & & \\
\begin{tabular}{lll} 
Sumit Capital & 3,300 & \\
Shiba Capital & 2,200 & 11,000
\end{tabular} & & \\
\cline { 3 - 3 } & & 15,000 & & 15,000 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & Particulars & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} \\
\hline Drawings & 20,000 & Balance b/d & 60,000 \\
\hline \multirow[t]{7}{*}{Nutan's Executor's} & 1,01,950 & Reserve fund & 7,500 \\
\hline & & Sumit's Capital (Goodwill) & 15,000 \\
\hline & & Shiba's Capital (Goodwill) & 22,500 \\
\hline & & Profit \& Loss (Suspense) & 8,750 \\
\hline & & Revaluation \(\mathrm{A} / \mathrm{c}\) & 5,500 \\
\hline & & Interest on Capital & 2,700 \\
\hline & 1,21,950 & & 1,21,950 \\
\hline
\end{tabular}

\section*{Nutan's Executor's Accounts}

Dr
\begin{tabular}{|l|r|l|c|}
\hline Particulars & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & Particulars & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Bank & 25,950 & Nutan's Capital & \(1,01,950\) \\
\begin{tabular}{lrl} 
Nutan's Executor's \\
Loan Transfer
\end{tabular} & 76,000 & & \\
\cline { 2 - 3 } & \(1,01,950\) & & \(1,01,950\) \\
\hline
\end{tabular}

\section*{Self Assessment}

State whether the following statements are true or false
13. After the death of a partner the total amount due to him is transferred to his, executor's account
14. Deceased partner's executor's account will be settled as per the agreement between the firm and executor's of the deceased partner.
15. The amount due to the deceased partner will always be settled in cash.

\subsection*{7.4 Summary}
- The rights of the legal representatives of the deceased partner depend on the provisions of the partnership deed
- The claim of the deceased partner is either paid immediately or transferred to Loan Account in the name of his legal representatives.
- The claim is usually determined on the same basis as that of a retired partner taking into account his share in the accumulated profits of the firm, goodwill, profit/loss on revaluation of assets/liabilities and so on.
- The key difference between the retirement and death of partner is that normally the retirement takes place at the end of an accounting period whereas death can occur at any time.
- If the death of a partner occurs during the year, the representatives of the deceased partner are entitled to his/her share of profits earned till the date of his/her death.
- Under this average profit method the calculation of profit is based on the average annual profit for the past few years say, 3 to 5 years.
- The profit can be calculated on the basis of last year's profit.
- Under turnover method, the share of profit is calculated on the basis of the profit and the total sales of the last year.
- After the death of a partner the total amount due to him is transferred to his, executor's account and paid off as per the provisions of the partnership deed immediately or in installments together with interest on the unpaid balance.

\subsection*{7.5 Keywords}

Executors: The representatives of the deceased partner who are entitled to claim his share.
Gaining Ratio: The ratio of the continuing partners inter se which has been purchased by them from the retiring or deceased partner.

\subsection*{7.6 Review Questions}
1. Accounting treatment in the event of death of the partner is on the same lines as that of the retirement of a partner except a few. What are those exceptions?
2. A, B and C are partners sharing in the ratio of \(5: 3: 2\). B dies on June 30, 2002 i.e. three months after closing of the books Profits for three years:
\[
\begin{aligned}
& 2000 \text { : ₹ } 25,000 \\
& 2001 \text { : ₹ } 20,000 \\
& 2002 \text { : ₹ } 15,000
\end{aligned}
\]

Find out B's share of profit on the date of death if as per terms of the agreement he was entitled to profit (i) on the basis of immediately preceding year's profits to the date of death (ii) on the basis of average profit of the preceding three years to the date of death.
3. \(\mathrm{X}, \mathrm{Y}\) and Z are partners sharing profit in the ratio of \(2: 2: 1\). X dies on July 1,2002 whereas books of accounts are closed on March 31st every year. Sales for the year 2001 amounts to ₹ \(4,00,000\) and that from April 1 to June 30, 2002 to ₹ \(1,50,000\). The profit for the year 2001 were calculated as ₹ 40,000 calculate X's share of profits in the firm for 2002 on the basis of sales.
4. Following is the Balance Sheet of the Pon, Kon and Bon as on March 31, 2003. They shared profits in the ratio of their capital.
\begin{tabular}{|lr|r|l|r|}
\hline Liabilities & & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} & Assets & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Sundry Creditors & & 4,600 & Land \& Bldg. & 23.400 \\
Reserve & & 5.400 & Plant \& Machinery & 13.000 \\
Capital Accounts : & & Stock & 4.700 \\
Pon & & Sundry Debtors & 6.500 \\
Kon & 12,000 & & Cash at Bank & 5.600 \\
Bon & \(\underline{8,000}\) & 44,000 & Cash in Hand & 800 \\
\hline & & \(\mathbf{5 4 , 0 0 0}\) & & \(\mathbf{5 4 , 0 0 0}\) \\
\hline
\end{tabular}

Pon died on June 30, 2003. Under the terms of partnership the executors of a deceased partner were entitled to:
(a) Amount standing to the credit of the Partner's Capital Account.
(b) Interest on Capital at \(12 \%\) per annum.
(c) Share of goodwill on the basis of four year's purchase of three year's average profits.
(d) Share of Profit from the closing of the last financial year to the date of death on the basis of the last year's profit. Profit for the years 2001, 2002 and 2003 were respectively ₹ 8,000 , ₹ 12,000 and ₹ 7,000 .

Record the necessary journal entries and draw up Pon's account to be rendered to his executors and his executor's account, presuming that they are paid by raising bank loan.
5. \(\quad \mathrm{M}, \mathrm{N}\) and C are in partnership, sharing profit in the proportion of \(2 / 3,1 / 6\) and \(1 / 6\) respectively. To clear the dues of deceased's partner an assurance was effected on their lives jointly for ₹ 10,000 without profit, at an annual premium of ₹ 650 to provide liquidity to the firm. C died on June 30, 2002, three months after the annual accounts had been prepared. In accordance with the partnership agreement, his share of the profits to the date of death was estimated on the basis of the profits for the preceding year. The agreement also provided for interest on capital at \(10 \%\) per annum and also for goodwill, which was to be brought into account at two years' purchase of the average profits for the last three years, prior to charging the abovementioned insurance premiums, but after charging interest on capital. C' capital on March 31, 2002, stood at ₹ 10,000 and drawings from then to the date of death amounted to ₹ 2,000 . The net profits of the business for the three preceding years amounted ₹ 3,350 , ₹ 4,150 and ₹ 4,050 , respectively, after charging interest on capital and insurance premiums. The premiums paid on policy are written off to Profit and Loss Account. You are instructed to prepare C's capital account as at the date of death and also prepare C's Executor's account.
6. Mansi and Puneet are in partnership sharing profits and losses \(3: 2\). They insure their lives jointly for ₹ 75,000 at an annual premium of ₹ 4,400 charged to the business. Puneet dies three months after the date of the last Balance Sheet. According to the partnership deed, the legal representatives of Puneet are entitled to the following payments:
(a) His capital as per the last Balance Sheet.
(b) Interest on above capital at \(8 \%\) per cent per annum to date of death.
(c) His share of profit to date of death calculated on the basis of last three year's profits.

His drawings are to bear interest at an average rate of 1 per cent on the amount irrespective of the period.

The net profits for the last three years, after charging insurance premium, were ₹ 20,000, ₹ 25,000 and ₹ 30,000 respectively. Puneet's capital as per balance sheet was ₹ 40,000 and his drawing to date of death were ₹ 2,000 .

Draw Puneet account to be rendered to his representatives.
7. Pass the necessary journal entries for the settlement of executor's \(\mathrm{A} / \mathrm{c}\).
8. Prepare the Proforma of capital \(\mathrm{A} / \mathrm{c}\) and explain the key elements.
9. Following is the balance sheet of Tony, Sony and Romy as on March 31, 2003
\begin{tabular}{|c|r|l|r|}
\hline Liabilities & \begin{tabular}{r} 
Amount \\
\((₹)\)
\end{tabular} & \multicolumn{1}{|c|}{ Assets } & \begin{tabular}{c} 
Amount \\
\((₹)\)
\end{tabular} \\
\hline Sundry Creditors & 16,000 & Bills Receivable & 16,000 \\
General Reserve & 16,000 & Furniture & 22,600 \\
Capital Accounts : & & Stock & 20,400 \\
Tony & & Sundry debtors & 22.000 \\
Sony & 20.000 & & Cash at Bank
\end{tabular}

Sony died on June 30, 2003. Under the terms of the partnership deed, the executors of a deceased partner were entitled to:
(a) Amount standing to the credit of the partner's capital account.
(b) Interest on capital at 5\% per annum.
(c) Share of goodwill on the basis of twice the average of the past three years' profit, and
(d) Share of profit from the closing of the last financial year to the date of death on the basis of the last three year's profit.

Profits for 2001, 2002 and 2003 were ₹ 12,000 , ₹ 16,000 and ₹ 14,000 respectively. Profits were shared in the ratio of capitals. Record the necessary journal entries and draw up the Sony's Account to be rendered to his executors.
10. List the key items that should be debited and credited to calculate the claim of deceased partner.

\section*{Answers: Self Assessment}
1. Legal representatives
3. Retirement, death
5. Deceased partner
7. Time, Sales
9. Debited
11. Last year's profit
13. True
15. False
2. Partnership deed
4. Credited
6. Credited
8. Executor's
10. Average profit
12. Turnover method
14. True

\section*{Notes \\ 7.7 Further Readings}

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Online link www.futureaccountant.com

\section*{Unit 8: Joint Life Policy}

\author{
CONTENTS \\ Objectives \\ Introduction \\ 8.1 Accounting Treatment for Joint Life Policy \\ 8.2 Individual Life Policies \\ 8.3 Summary \\ 8.4 Keywords \\ 8.5 Review Questions \\ 8.6 Further Readings
}

\section*{Objectives}

After studying this unit, you will be able to:
- Define joint life policy
- Illustrate the accounting treatment for joint life policy
- Prepare the accounts for individual life policies

\section*{Introduction}

The term Joint Life Policy means an insurance policy taken out by the partnership firm on the joint lives of all the partners. The amount of such a policy is payable by the Insurance Company either on death of any partner or on maturity whichever is earlier. The main objective behind taking out such a policy by the partnership firm is to mobilise funds to settle the claims of the deceased partner in case of death of a partner without affecting the Working Capital of the business. If any one of the partners covered by such a policy expires, the policy gets matured immediately and with the amount recovered from Insurance Company, the claim of the deceased partner is settled. However, it is important to note here that the profit arising out of such a policy should always be distributed to all the partners including the deceased partner in their profit-sharing ratio.

What is surrender value?
Surrender Value (SV) is the amount payable by an insurance company on the surrender/ discontinuation of joint life policy before the date of maturity. However, the surrender value keeps on increasing with the successive payment of premium.

\section*{Notes \\ 8.1 Accounting Treatment for Joint Life Policy}

There are two ways to record the Joint Life Policy transactions by the firm:
1. Treated as an expense of firm: Under this method the premium paid is treated as a business expense. The premium is chargeable to the profit and loss account.

Accounting entries in the books of the firm will be as follows:
(a) For payment of premium:

Joint life policy premium Dr.
To Bank A/c
(b) For transfer of premium paid to profit and loss account at the end of the year:

Profit and loss A/c
Dr.
To Joint life policy premium
On the maturity of the policy, if the death takes place before the due date of the premium, the premium will not be paid in the year of death. This would imply that entry for payment of premium would not be recorded. On maturity, the insurance policy will be surrendered to register the claim with the insurance company and sum assured will be collected.

For this following entries are to be recorded:
(i) On the death of partner, for making claim with the insurance company Insurance Company/Insurance claim receivable A/c Dr.

To Joint Life Policy
(ii) For Claim duly received from Insurance Co. on the date of receipt

> Bank A/c Dr.

To Insurance Co./Insurance claim receivable A/c
(iii) Claim due will be distributed among existing partners (including outgoing)

Joint life policy Dr.
To All partner's capital A/c (individually)
2. When premium paid is treated as an asset at an amount equal to the surrender value of joint life policy

In such a case, Joint Life Policy Account will appear in the books of the firm which must be shown as an asset in the Balance Sheet at its present value i.e. surrender value.

Following accounting entries are to be recorded in this case:
(i) \(\quad 1^{\text {st }}\) Year: On the date when policy is taken and premium is paid.

Joint Life Policy
To Bank A/c
(ii) At the end of first year, the joint life policy account will show the balance which is equal to its surrender value. The difference between the premium paid and surrender value will be transferred to profit and loss account.

Profit and loss A/c
Dr.
To Joint Life Policy
,
Notes Amount = surrender value in the previous year + premium paid during the current year - surrender value in the current year.

Second year and onwards, the entries (i) and (ii) shall be repeated until the last year.
In the last year, i.e., the year of death, entry no. (i) will be recorded only if death takes place after the due date of premium and entry no. (ii) will not be recorded at all.
(iii) On maturity of policy or in the event of death, entry for making the insurance claim will be:

> Insurance company A/c Dr.

To Joint Life Policy
(iv) On the date of receipt when insurance company pays the insurance claim due:

Bank A/c Dr.
To Insurance Company
(v) Balance standing in Joint Life Policy account is distributed among all partners in profit sharing ratio.

Balance in Joint Life Policy account = Total claim due - (Surrender value of the policy in the previous year + premium paid during the current year).

E=E
Example: Jatin, Gagan and Kiran are equal partners have taken a Joint Life Policy of ₹ 60,000 on June 30, 1999 paying annual premium of ₹ 6,000 . Surrender values for: 1999 - NIL; 2000-₹ 3,000; 2001-₹ 6,000; 2002-₹ 10,000: Gagan die on July 3, 2002.

Record necessary entries for the year 2002:
(i) If premium paid is transferred to profit and loss account every year.
(ii) If premium paid is treated as an asset. Also prepare Joint Life Policy account for 2002.

\section*{Notes \\ Solution:}
(i) If premium paid is transferred to profit and loss account every year.

Books of Jatin, Gagan and Kiran
Journal


Note: It is assumed that the claim registered with insurance company will be received in due course of time.
(ii) If premium paid is treated as an asset. Also prepare Joint Life Policy account for 2002.

Books of Jatin, Gagan and Kiran
Journal


Dr. Cr.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \[
\begin{array}{|l|}
\hline \text { Date } \\
2003 \\
\hline
\end{array}
\] & Particulars & J.F. & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & \[
\begin{array}{|l|}
\hline \text { Date } \\
2003
\end{array}
\] & Particulars & J.F. & Amount (₹) \\
\hline Jan. 1 & Balance b/f & & 6,000* & July 3 & Insurance Co. & & 60.000 \\
\hline July 3 & Bank & & 6.000 & & & & \\
\hline & Jatin's capital & & 16,000 & & & & \\
\hline & Gagan's capital & & 16,000 & & & & \\
\hline & Kiran's capital & & 16,000 & & & & \\
\hline & Total & & 60,000 & & Total & & 60,000 \\
\hline
\end{tabular}
* This amount is the balance of Joint Life policy account on the date of death, which is the surrender value of Joint Life Policy of previous year to the death, i.e. year 2001.

Task Nita and Rita are partners in a business sharing profits in the ratio of \(7: 3\). The firm has taken a joint life insurance policy on the lives of partners for a sum of ₹ \(1,00,000\) with effect from 30-06-99. The annual premium is ₹ 10,000 . On Jan 2, 2002, Nita died and amount of ₹ \(1,20,000\) (including bonus) was received from the Life Insurance Company. The firm has charged the premium to Profit and Loss Account each year on financial year basis. You are required to make necessary journal entries assuming that the amount was received on Feb.1, 2002.

\section*{Joint Life Policy Reserve A/c}

When premium paid on joint life policy is treated as capital expenditure then a reserve may also be created equal to the surrender value. Then the joint life policy will be shown at its surrender value on the asset side of the Balance Sheet and Joint Life Policy Reserve account will be shown at the same amount on the liability side of the balance sheet. If on the admission of a partner it is decided not to show these two accounts in the books of accounts in future then these accounts will be closed by debiting joint life policy reserve account and crediting joint life policy account. The following journal entry will be recorded.

Joint Life Policy Reserve A/c Dr.
Joint Life Policy
E=
Example: On the admission of Rohit on April 1, 2003 in the firm of Ram and Shyam there existed a balance of ₹ 40,000 each in the joint life policy account and joint life policy reserve account. It was decided that these accounts will not be shown in the books of the new firm. Record the necessary journal entry for the same.
Solution:
Books of Ram, Shyam and Rohit
Journal
\begin{tabular}{|c|c|c|c|c|}
\hline Date & Particulars & L.F. & Dr (₹) & Cr. (₹) \\
\hline April 1 & \begin{tabular}{l} 
Joint Life Policy Reserve A/c \\
\\
\\
\\
\begin{tabular}{c} 
Joint Life Policy \\
(Joint life policy and joint life policy reserve accounts \\
closed on Rohit's admission)
\end{tabular}
\end{tabular} & 40,000 & 40,000 \\
\hline
\end{tabular}


\begin{tabular}{|lll|}
\hline Third Year \\
Jan 1, 2002 \\
Joint Life Policy account \\
To Cash \\
(Premium paid on the policy)
\end{tabular}\(\quad\) Dr. 1,000 \begin{tabular}{l} 
1,000 \\
\hline \begin{tabular}{l} 
31 Dec., 2002 \\
\begin{tabular}{l} 
P\&L Appropriation account \\
To Joint Life policy Reserve Account \\
(The reserve created against premium payment)
\end{tabular} \\
\hline \begin{tabular}{lll} 
31st Dec., 2001 \\
Joint Life Policy Reserve Account \\
Joint Life Policy Account
\end{tabular} \\
(Both JLP and Reserve reduced to the surrender value by mutual elimination)
\end{tabular} \\
\hline
\end{tabular}

\section*{Fourth Year}
\begin{tabular}{|lll|}
\hline \begin{tabular}{l} 
1st January 2003 \\
Joint Life Policy account \\
To Cash
\end{tabular} & Dr. 1,000 \\
(Premium paid on the policy
\end{tabular}\(\quad\) Dr. 100,000 \(\quad 1,000\)
\begin{tabular}{|l|l|r|l|l|r|}
\hline \multicolumn{1}{|c|}{ Date } & \multicolumn{1}{|c|}{ Particulars } & Amount & \multicolumn{1}{c|}{ Date } & \multicolumn{1}{c|}{ Particulars } & Amount \\
\hline 1 Jan, 2000 & To Cash & 1,000 & 31 Dec 2000 & By JLP Reserve A/c & 1,000 \\
\hline & & 1,000 & & & 1,000 \\
\hline 1 Jan 2001 & To Cash & 1,000 & 31 Dec, 2001 & \begin{tabular}{l} 
By JLP Reserve A/c \\
By Balance c/d
\end{tabular} & 700 \\
\hline & & 1,000 & & & 300 \\
\hline 1 Jan 2002 & To balance b/d & 300 & 31 Dec, 2002 & By JLP Reserve A/c & 1,000 \\
31 Dec 2002 & To Cash & 1,000 & & By Balance c/d & 750 \\
\hline & & 1,300 & & & 750 \\
\hline 1 Jan 2003 & To balance b/d & 750 & 10 Feb 2003 & By JLP Reserve & 1,300 \\
\hline 10 Feb 2003 & To Cash \\
& To A's Capital 39,600 & 1,000 & & By Insurance Claim & 100,000 \\
& To B's Capital 39,600 & & & & 750 \\
\hline & To C's Capital 19,800 & 99,000 & & & 100,750 \\
\hline
\end{tabular}

Joint Life Policy Reserve Account
\begin{tabular}{|c|l|r|l|l|r|}
\hline \multicolumn{1}{|c|}{ Date } & \multicolumn{1}{|c|}{ Particulars } & Amount & \multicolumn{1}{c|}{ Date } & \multicolumn{1}{c|}{ Particulars } & Amount \\
\hline 31 Dec 2000 & To JLP Account & 1,000 & \(31 \mathrm{Dec}, 2000\) & By P\&L Appropriation & 1,000 \\
\hline & & 1,000 & & & 1,000 \\
\hline 31 Dec 2001 & To JLP Account & 700 & 31 Dec, 2001 & By P\&L Appropriation & 1,000 \\
& To Balance c/d & 300 & & & 1,000 \\
\hline & & 1,000 & & & 300 \\
\hline 31 Dec 2002 & To JLP Account & 550 & 1 Jan, 2002 & By Balance b/d & 1,000 \\
\hline & To Balance c/d & 750 & 31 Dec, 2002 & By P\&L Appropriation & 1,300 \\
\hline & & 1,300 & & & 750 \\
\hline 10 Feb 2003 & To JLP Account & 750 & 1 Jan, 2003 & By Balance b/d & 750 \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
1. The amount of joint life policy is payable by the Insurance Company either on death of any partner or on \(\qquad\) . whichever is earlier.
2. The main objective behind taking out such a policy by the partnership firm is to mobilise funds to settle the claims of the deceased partner in case of death of a partner without affecting the \(\qquad\) of the business.
3. ................. is the amount payable by an insurance company on the surrender/ discontinuation of joint life policy before the date of maturity.
4. The surrender value keeps on increasing with the successive payment of \(\qquad\)
5. Amount \(=\) surrender value in the previous year + \(\qquad\) - surrender value in the current year.

\subsection*{8.2 Individual Life Policies}

The firm may decide to take the insurance policy separately for each of the partners on their lives. For such insurance policies, if premium is paid by the firm, being a transaction of business, it becomes an asset of the firm. Whenever death of any partner occurs, policy matures, the firm makes a claim to the insurance company and claim so received is distributed among all the partners in the profit sharing ratio. The heir of deceased partner will be entitled to the proportionate share in the policy of deceased. Further, surrender values of the policies of other partners will be distributed among all the partners (including heir of deceased) in their profit sharing ratio. The Joint Life Policy will be shown in the Balance Sheet at its surrender value.

Example: \(\mathrm{X}, \mathrm{Y}\) and Z are partners in the ratio of \(5: 3: 2\). X died on \(14^{\text {th }}\) Aug. 2002. The firm had taken insurance policies on the lives of the partners, premium being charged to profit and loss account every year.

\section*{The Policy amount and surrender value (on 14.08 .2002 )}
\begin{tabular}{|l|c|c|}
\hline Particulars & \begin{tabular}{c} 
Policy Amount \\
\((\mathrm{Y})\)
\end{tabular} & \begin{tabular}{c} 
Surrender Value \\
\((\mathrm{₹})\)
\end{tabular} \\
\hline Life Insurance Policies: & 60,000 & 25,000 \\
X & 90,000 & 35,000 \\
Y & 60,000 & 15,000 \\
\hline Z & & \\
\hline
\end{tabular}

Work out the amount payable to X's legal representatives regarding insurance policies. Record necessary journal entries.

\section*{Solution:}

Books of \(\mathbf{X}, \mathrm{Y}\) and Z
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \hline \text { Date } \\
& 2002
\end{aligned}
\] & Particulars & L.F. & Debit
Amount (₹) & Credit Amount (₹) \\
\hline Aug. 14 & \begin{tabular}{l}
Insurance Company A/c \\
To life policy \\
(claim for the policy registered)
\end{tabular} & \multirow[t]{4}{*}{} & 60,000 & 60,000 \\
\hline Aug. 14 & \[
\begin{aligned}
& \text { Bank A/c } \quad \mathrm{Dr} \\
& \text { To insurance company A/c } \\
& \text { (policy amount received on X's death) }
\end{aligned}
\] & & 60,000 & 60,000 \\
\hline Aug. 14 & Life policy A/c
To X's A/c
To Y's A/c
To Z's A/c
(Amount of life policy transferred to
capital A/c) & & 60,000 & \[
\begin{aligned}
& 30,000 \\
& 18,000 \\
& 12,000
\end{aligned}
\] \\
\hline Aug. 14 & \begin{tabular}{lr} 
Y's capital A/c & Dr \\
Z's capital A/c & Dr \\
To X's capital A/c & \\
(X's share credited to him in gaining \\
ratio of \(3: 2\) ) &
\end{tabular} & & \[
\begin{aligned}
& 15,000 \\
& 10,000
\end{aligned}
\] & 25,000 \\
\hline
\end{tabular}
1. Surrender value of policies of \(Y\) and \(Z=₹ 35,000+₹ 15,000=₹ 50,000\)
2. \(X^{\prime}\) 's share \(=₹ 50000 \times \frac{5}{10}=₹ 25000\)

\section*{Self Assessment}

Fill in the blanks:
6. In case of individual insurance policies, if premium is paid by the firm, being a transaction of business, it becomes an \(\qquad\) of the firm.
7. The heir of deceased partner will be entitled to the \(\qquad\) share in the policy of deceased.
8. Surrender values of the policies of other partners will be distributed among all the partners in their \(\qquad\) ratio.
9. The Joint Life Policy will be shown in the \(\qquad\) at its surrender value.
10. Claim received under individual life policy is distributed among all the partners in the
\(\qquad\) ratio.

\subsection*{8.3 Summary}
- For the purpose of ensuring liquidity in the firm to settle the claim of the retiring/ deceased partner an assurance policy is taken up by the partners on their lives collectively.
- The insurance company agrees to pay the sum assured (i.e., the amount for which the policy has been taken) to the firm on the maturity date.
- Maturity date is the date of death of any of the partners or the date on which the term of the policy expires, whichever is earlier.
- The firm in turn agrees to pay to the insurance company the amount of premium periodically.
- The amount of premium payable will be same in each of the years.
- \(\quad\) Surrender Value (SV) is the amount payable by an insurance company on the surrender/ discontinuation of joint life policy before the date of maturity.
- However, the surrender value keeps on increasing with the successive payment of premium.
- The firm may decide to take the insurance policy separately for each of the partners on their lives.
- Under individual life policy the heir of deceased partner will be entitled to the proportionate share in the policy of deceased.
- Further, surrender values of the policies of other partners will be distributed among all the partners (including heir of deceased) in their profit sharing ratio.

\subsection*{8.4 Keywords}

Joint Life Policy: An insurance policy taken by the partnership firm on the joint lives of all the partners.

Surrender Value: Amount receivable from the insurance company on surrendering the policy before maturity.

\subsection*{8.5 Review Questions}
1. Why the Joint Life Policy is needed? What are the different ways of treating Joint Life Policy in accounts?
2. What is the objective of taking a joint life policy by the partners?
3. What is the accounting treatment of the claim received on account of joint life policy from insurance company on the event of death of a partner?
4. What is surrender value?
5. Madhu and Shyam who shared profits in the ratio of \(3: 2\) took out a Joint Life Policy on May 14, 1999 for ₹ 60,000 . The annual premium was ₹ 8,500 . The surrender value of the policy was: 1999 - NIL ; 2000 - ₹ 4,500 ; 2001- ₹ 8,000 ; and 2002 - ₹ 12,000 .
Madhu died on Nov 14, 2002 and the amount of the policy was received on Dec.1, 2002. The books are closed on December 31 each year. Give journal entries assuming that the firm treats premium paid as asset and maintains a Joint Life Policy Account at its surrender value. Also prepare Joint Life Policy account.
6. Mahesh and Raj sharing profit in the ratio of \(2: 3\), took out a joint life policy on July 1, 1999 of ₹ 80,000 for paying annual premium of ₹ 8,000 . The surrender values were 1999 - NIL; 2000 - ₹ 4, 200; 2001-₹ 7,500; 2002-₹ 12,000. Raj died on March 18, 2002 and claim was received. Books are closed on calendar year basis. Prepare Joint Life Policy Account.
7. Illustrate the different ways for accounting treatment of joint life policy.
8. State the difference between joint life policy and individual life policy with a suitable example.
9. Pass necessary entries on maturity of the policy.
10. Prepare the proforma of Joint Life Policy A/c.

\section*{Answers: Self Assessment}
1. Maturity
3. Surrender Value (SV)
5. Premium paid during the current year
7. Proportionate
9. Balance Sheet
2. Working Capital
4. Premium
6. Asset
8. Profit sharing
10. Profit sharing

\section*{Notes 8.6 Further Readings}

\author{
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}

Unit 9: Dissolution of Partnership
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\section*{Objectives}

After studying this unit, you will be able to:
- Distinguish between the dissolution of partnership and firm
- Illustrate the settlement of accounts
- Discuss Garner v/s Murray rule including insolvency of firm
- Define piecemeal distribution

\section*{Introduction}

In the present unit, you will study about the dissolution of partnership and firms. The unit discussed about the dissolution of partnership and firm, settlement of accounts and accounting treatment. Section 39 provides that the dissolution of partnership between all the partners of a firm is called the "dissolution of the firm". It follows that if the dissolution of partnership is not between all the partners, it would not amount to "dissolution of firm", but it would nevertheless be "dissolution of partnership". Thus, dissolution of firm always implies dissolution of partnership, but dissolution of partnership need not lead to dissolution of firm. Dissolution of partnership may involve merely a change in the relation of the partners and not the dissolution of the firm.

\begin{abstract}
Notes For example, where A, B and C were partners in a firm and C died or was adjudged insolvent, the partnership firm would come to an end; but if the partners had agreed that the death, retirement, insolvency of the partner would not dissolve the firm on the happening of these contingencies, the 'partnership' would certainly come to an end although the 'firm' or as the Act calls it, a 'reconstituted firm', might continue under the same name.

Thus, a reconstitution of a firm involves a change in the relation of partners whereas in the case of dissolution of firm, there is complete severance of relationship between all partners.
\end{abstract}

\subsection*{9.1 Dissolution of Partnership and Firm}

Dissolution of partnership is different from the dissolution of a firm. As we discussed earlier that dissolution of partnership does not demand dissolution of the firm but dissolution of the firm means the dissolution of partnership.

\subsection*{9.1.1 Dissolution of Partnership}

Dissolution of the partnership (owing to retirement, death or bankruptcy of a partner), merely involves change in the relation of the partners but it does not end the firm. The dissolution of partnership can be understood from the following points:
1. Dissolution of partnership means a contract among the partners to dissolve the partnership. This is because of the changes in the constitution of the partnership.
2. Partnership is created at will; similarly it can be wound up voluntarily.
3. If partnership is dissolved, the firm will not dissolve if the other partners desire to continue.
4. Dissolution of partnership require the revaluation of assets and liabilities.
5. In dissolution of partnership the final settlement of accounts is not required.

\subsection*{9.1.2 Dissolution of Firm}

On dissolution of the firm, the business of the firm stops its affairs and wind up by selling the assets and by paying the liabilities and discharging the claims of the partners. The dissolution of partnership among all partners of a firm is called dissolution of the firm.

The different methods of dissolution are as follows:
(i) By mutual consent: Section 40 provides that a firm may, at any time, be dissolved with the consent of all the partners. This applies to all cases whether the firm is for a fixed period or otherwise.
(ii) By agreement: Section 40 also provides for the dissolution of a firm in accordance with a contract between the partners. The contract providing for dissolution may have been incorporated in the partnership deed itself or in a separate agreement.
(iii) By the insolvency of all the partners but one: If all the partners or all the partners but one become insolvent, there is a dissolution of the firm. Section 41 calls this as compulsory dissolution.
(iv) By business becoming illegal: Section 41 provides that a firm is dissolved by the happening of any event which makes it unlawful for the business of the firm to be carried on or for the partners to carry it on in partnership. But, if the partnership relates to more than one adventure, the illegality of one or more of them does not prevent the lawful adventure from being carried on by the firm.
(v) Partners becoming alien enemies: Section 41 also covers cases of partnership between persons some of whom become alien enemies by a subsequent declaration of war. In such a case partnership is dissolved, because trading with an alien enemy is against public policy.

Section 41 covers cases of compulsory dissolution of firm by operation of law.
(vi) By notice of dissolution of partnership at will: Section 43 provides that where the partnership is at will, a partner may give a notice in writing to the other partners of his intention to dissolve the firm. The notice must state the intention to dissolve the firm and be in writing. The firm is dissolved as from the date mentioned in the notice as the date of dissolution, or if no date is mentioned then from the date of communication of the notice.

\section*{\.}

Caution Filing a suit for dissolution is not a notice as required by this section. In such a case, the date of dissolution will be the date of passing of the preliminary decree for dissolution [Banarsi Das v. Kanshi Ram , A I R (1983) S.C. 1165].
(vii) Dissolution by Court (s.44): At the suit of a partner, the court may dissolve a firm on any of the following grounds:
(a) If a partner has become of unsound mind: The application in this case may be made by any of the partners or by the next friend of the insane partner. In the case of insanity of a dormant partner, the court will not order dissolution, unless a very special case is made out for dissolution.
(b) Permanent incapacity of a partner: The court may order for dissolution of partnership, if a partner becomes permanently incapable of performing his duties as a partner. The application for dissolution, in such a case, may be made by any of the partners and not by the incapacitated partner. However, where a partner is attacked with paralysis which, on evidence, is found to be curable, dissolution may not be granted.
(c) Misconduct of a partner affecting the business: If a partner is guilty of conduct which is likely to affect prejudicially the carrying on of the business of the firm, the court may order dissolution. For example, A partner of a mercantile firm is engaged in speculation in cotton. This act may be regarded a sufficient ground for dissolution of the firm.
(d) Wilful and persistent disregard of partnership agreement by a partner: If a partner wilfully and persistently commits a breach of the partnership agreement regarding management, or otherwise conducts himself in such a way that is not reasonably practicable for the other partners to carry on business in partnership with him, the court may order dissolution.
(e) Transfer of interest or share by a partner: If a partner transfers, in any way (e.g., by sale, mortgage or charge), his whole interest in the partnership to a third party (outsider) or allows his share to be charged in execution of a decree against him or allows the same to be sold for arrears of land revenue or for charges recoverable as land revenue, the court may dissolve the partnership.
(f) The court can also dissolve partnership where the business of the firm cannot be carried on save at a loss. The court can order dissolution even though the partnership is for a fixed period [Rehmat-un-nisa-v. Price, 42 Bom. 380].

Notes (g) Just and equitable: The court can order dissolution on any other ground which in the opinion of the court is a fit ground for dissolution of partnership. Dissolution on this ground has been granted in case of deadlock in the management, disappearance of the substratum of the business, partners not on speaking terms, etc.

Notes Distinction Between Dissolution of Partnership and Dissolution of Firm
\begin{tabular}{|c|c|c|}
\hline Basis & Dissolution of Partnership & Dissolution of Firm \\
\hline 1. Termination of business & No, the business is not terminated. & The business of the firm is closed. \\
\hline 2. Settlement of assets and liabilities & Assets and liabilities are revalued and new balance sheet is drawn. & Assets are sold and realized and liabilities are paid off. \\
\hline 3. Court's Intervention & Court does not intervene because partnership is dissolved by mutual agreement and through the process of reconstitution. & A firm can be dissolved by the court's order. \\
\hline 4. Economic Relationship & Economic relationship may remain and changes. & Economic relationship between the partners comes to an end. \\
\hline 5. Closure of books & Does not require because the business is not terminated. & All books of accounts are closed. \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
1. Dissolution of partnership does not demand dissolution of the \(\qquad\)
2. Dissolution of partnership requires the \(\qquad\) of assets and liabilities.
3. The dissolution of partnership among all partners of a firm is called dissolution of the
\(\qquad\)
4. In case when the business becomes illegal there will be \(\qquad\) of the firm.
5. \(\qquad\) is created at will.
6. Dissolution of \(\qquad\) requires revaluation of assets and liabilities.

\subsection*{9.2 Settlement of Accounts}

Usually the Deed of Partnership contains an accounting clause according to which the final accounts between partners are settled. In the absence of such an agreement, s. 48 provides as follows:
- The losses, including losses on capital, must be paid, first from profits, next out of capital and lastly, if necessary, by contribution of each partner in proportion to his share in profits.
- The assets of the firm, including sums contributed by partners to make up deficiency of capital, shall be applied as follows: (a) in paying debts of the firm to outsiders; (b) in paying each partner rateably for advances made by him to the firm as distinct from capital; (c) in paying each partner, rateably, amount due for capital contribution, and (d) the residue in paying each partner in accordance with his share in the profits of the firm.
- If a partner becomes insolvent or otherwise cannot pay his share of the contribution, the solvent partners must share rateably the available assets (including their own contribution to the capital deficiency), i.e., the available assets will be distributed in proportion to their original capital. This is called the rule in Garner v. Murray (1904)1 Ch. 57.

\subsection*{9.2.1 Treatment of Firm's Debts and Private Debts}

Under section 49 of the Indian Partnership Act, the following provisions shall apply in case a of firm's debts and private debts:
- The creditors of the firm (third party liabilities) should be paid out of the assets of the firm. If there is any surplus, it will be divided among the partners as per their claims which can be utilised for paying the private liabilities of the partners.
- Similarly, the private creditors of partners should be first paid out of the private assets of partners and if there is any surplus, it can be utilised for paying off the partnership debts.

\subsection*{9.2.2 Accounting Treatment of Assets and Liabilities}

As we discussed earlier that in case of dissolution of a partnership firm the business activities of a firm comes to an end and the firm get dissolved. As soon as the partners decide to discontinue the business of the firm, it becomes necessary to settle its accounts. For this purpose, all the assets have to be sold and the liabilities are to be paid off. For this purpose a separate account called 'Realisation Account' is opened.

Realisation is an account in which assets excluding cash in hand and bank are transferred at their book value and all external liabilities are transferred at their book.

The following entries are passed in the books to record the disposal of assets and discharge of liabilities:
1. For Transfer of assets:
\begin{tabular}{|c|lc|c|c|c|}
\multicolumn{2}{c}{} & \multicolumn{2}{c}{ Dr. } & \multicolumn{1}{c}{ Cr. } \\
\hline S. No. & Particulars & L.F. & ₹ & ₹ \\
\hline & \begin{tabular}{l} 
Realization A/c \\
To Sundry Assets A/c \\
(Transfer of assets)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}

\section*{Notes}


Caution It is to be noted that the following items on the assets side of the Balance Sheet are not transferred to the Realisation Account:
(a) (i) Undistributed loss (i.e. Debit Balance of Profits and Loss account)
(ii) Fictitious assets or deferred revenue expenditures such as preliminary expenses;
(b) Cash in hand, and Cash at Bank, will be the opening balance of the Cash/Bank account.
(c) Provisions and reserves against assets should be closed by crediting the Realisation Account.
2. For Transfer of Liabilities:
\begin{tabular}{l|lc|l|l|l}
\hline & \begin{tabular}{c} 
External Liabilities A/c \\
To Realization A/c \\
(Transfer of external liabilities)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
3. Treatment of Accumulated Reserves and Profit/loss

All the balance of Reserve or Undistributed Profit, Reserve fund or other reserves are transferred to partner's capital account in their profit sharing ratio. The following entries are to be passed:
\begin{tabular}{l|ll|l|l|l}
\hline & \begin{tabular}{ll} 
Reserve A/c & Dr. \\
Profit and Loss A/c & \\
Any Other fund A/c & Dr.
\end{tabular} & & \\
To Partner's Capital A/c & Dr. & & & \\
(Transfer of profit and reserves) & & & & \\
\hline
\end{tabular}
4. For Sale of Assets
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Cash/Bank A/c \\
To Realization A/c \\
(sale of assets)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
5. For assets taken over by the partner
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Partner's Capital A/c \\
To Realization A/c \\
(Assets taken over by partner)
\end{tabular} & Dr & & \\
\hline
\end{tabular}
6. Payment of liabilities in cash

If any liabilities is paid off in cash:
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
To Cash/Bank A/c \\
(payment of liabilities)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
7. Payment of liabilities by the partners
\begin{tabular}{l|lc|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
To Partner's Capital A/c \\
(liabilities taken over by partner)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
8. Settlement of loan given by the partner
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Partner's Loan A/c \\
To Bank A/c \\
Partner's loan paid off.
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
9. Payment of realization expenses:
(a) When realisation expenses are paid by firm:
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
To cash A/c \\
(expenses paid off)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
(b) When realisation expenses are paid by partner on behalf of the firm:
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
To Partner's capital A/c \\
(payment of realisation expenses by partner on behalf \\
of the firm)
\end{tabular} & & & \\
\hline
\end{tabular}
10. Closing of realisation \(\mathrm{A} / \mathrm{c}\)

The balance in the realisation account would show either profit or loss on dissolution. If it is a profit, it is transferred to Partner's capital accounts in their profit sharing ratio.
(a) In case of profit, the following entries are to be passed:
\begin{tabular}{l|l|l|l|l}
\hline & Realization A/c & Dr. & & \\
To Partner's Capital A/c & & & & \\
& Profit on realization transferred. & & & \\
\hline
\end{tabular}
(b) In case of loss, Reserve entry is to be passed.
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{c} 
Partner's Capital A/c \\
To Realization A/c \\
Loss on realization transferred.
\end{tabular} & Dr. & & \\
\hline
\end{tabular}

Notes
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Proforma of Realisation A/C} \\
\hline Particulars & Amount (₹) & Particulars & Amount (₹) \\
\hline \begin{tabular}{l}
All Assets A/c (Book Value) (Except Cash/Bank) \\
Cash/Bank A/c \\
(Payment of external liabilities) \\
Partners Capital A/c (if any liability paid by partner) \\
Cash/Bank A/c \\
(Expenses on realisation) \\
Partners capital A/c \\
(Expenses on realisation paid by a partner) \\
Partners capital A/c \\
(For transferring profit on realisation)
\end{tabular} & & \begin{tabular}{l}
All External liabilities A/c (Book Value) \\
Cash/Bank A/c \\
(Amount realised on sale of various assets) \\
Partners' capital A/c (If any asset is taken over) \\
Partners Capital A/c (For transferring loss on realisation)
\end{tabular} & \\
\hline
\end{tabular}

Example: Pass the necessary journal entries on the dissolution of a firm, after various assets (other than cash) and third party liabilities have been transferred to Realization Account:
1. Bank Loan ₹ 10,000 is paid.
2. Stock worth \(₹ 5,000\) is taken over by partner A.
3. Expenses on dissolution amounted to ₹ 1,200 and were paid by partner B.
4. A typewriter, completely written off in the books of accounts, was sold for ₹ 400 .
5. Loss on Realization ₹ 7,000 was to be distributed between A and B in the ratio of \(5: 2\).

\section*{Journal Entries}


\subsection*{9.2.3 Treatment of Goodwill}

Section 55 provides that in settling the accounts of a firm after dissolution, goodwill shall, subject to contract between the partners, be included in the assets and it may be sold either separately or along with other property of the firm.
Where the goodwill of a firm is sold after dissolution, a partner may carry on a business competing with that of the buyer and he may advertise such business but subject to agreement between him and the buyer, he may not (a) use the firm's name; (b) represent himself as carrying on business of the firm; or (c) solicit the custom of persons who were dealing with the firm before its dissolution.

Any partner may, upon the sale of goodwill of a firm, make an agreement with the buyer that such partner will not carry on any business similar to that of the firm within a specified period or within specified local limits. Such an agreement shall be void if the restrictions imposed are unreasonable.

There is nothing special in treatment of goodwill on dissolution of a firm. On dissolution of a firm:
- If goodwill appears in the Balance Sheet, it is treated like any other asset and is transferred to realization account.
- If goodwill does not appear in the balance sheet, no entry is passed for this.
- If something is realized or Goodwill is purchased by any one of the partners, then either Cash Account is debited or Partner's Capital A/c is debited and Realization Account is credited.

\section*{Notes}

\subsection*{9.2.4 Treatment of unrecorded Assets or Liabilities}

Unrecorded assets and liabilities are those assets/liabilities that have been written-off form the books of accounts but physically still exist in the operation. For example, there is an old typewriter, which is still in working condition though its book value is zero. Similarly, there may be some liabilities, which do not appear in the Balance Sheet, but actually they are still there. For example, a bill discounted with bank, on dissolution it was dishonored and had to be taken up by the firm for payment purposes.

The following journal entries will be passed to record such transactions:
1. For sale of unrecorded assets for cash:
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Cash/Bank A/c \\
To Realization A/c \\
(sale of unrecorded assets)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
2. For unrecorded assets taken over by the partner

If any unrecorded assets is taken over by partner/s, then:
\begin{tabular}{l|ll|l|l|l}
\hline & \begin{tabular}{l} 
Partner's Capital A/c \\
To Realization A/c \\
(Unrecorded assets taken over by partner)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
3. Payment of unrecorded liabilities in cash

If any unrecorded liabilities is paid off in cash:
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
To Cash/Bank A/c \\
(payment of unrecorded liabilities)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
4. Payment of unrecorded liabilities by the partner on behalf of the firm

If any unrecorded liabilities is paid off in cash:
\begin{tabular}{l|ll|l|l|l}
\hline & \begin{tabular}{l} 
Realization A/c \\
\begin{tabular}{l} 
To Partner's Capital A/c \\
(payment of unrecorded liabilities by partner on \\
behalf of the firm)
\end{tabular}
\end{tabular} & Dr & & \\
\hline
\end{tabular}

Example: X and Y are equal partners in a firm. They decided to dissolve the partnership on December 31, 2006 when the balance sheet stood as under:

Balance Sheet as on Dec 31, 2006
Notes
\begin{tabular}{|c|c|c|c|}
\hline Liabilities & ₹ & Assets & ₹ \\
\hline Creditors & 54,000 & Cash at bank & 22,000 \\
\hline Reserve for Dep. on Plant & 20,000 & Sundry debtors & 24,000 \\
\hline Loan & 80,000 & Stock & 84,000 \\
\hline Capital Account & & Furniture & 50,000 \\
\hline & & Plants & 94,000 \\
\hline \(X \quad 1,20,000\) & & Leasehold lands & 1,20,000 \\
\hline Y \(\quad 1,20,000\) & 2,40,000 & & \\
\hline & 3,94,000 & & 3,94,000 \\
\hline
\end{tabular}

Assets were realised as follows:
\begin{tabular}{ll} 
& \(₹\) \\
Leasehold land & \(1,44,000\) \\
Furniture & 45,000 \\
Stock & 81,000 \\
Plant & 96,000 \\
Sundry debtors & 21,000
\end{tabular}

The creditors were paid ₹ 51,000 in full settlement. Expenses of realisation amounted to ₹ 6,000 .
Show the ledger accounts to record the dissolution measures.

\section*{Solution:}

\section*{Books of \(\mathbf{X}\) and \(Y\)}
\begin{tabular}{|c|c|c|c|}
\hline Particulars & ₹ & Particulars & ₹ \\
\hline To Sundry Assets: & & By Creditors & 54,000 \\
\hline S Debtors 24,000 & & By Loan & 80,000 \\
\hline Plants 94,000 & & By Bank & \\
\hline Stock 84,000 & & S Debtors 21,000 & \\
\hline Leasehold land 1,20,000 & & Plants 96,000 & \\
\hline Furniture 50,000 & 3,72,000 & Stock 81,000 & \\
\hline To Bank a/c & & Leasehold land 144,000 & \\
\hline Creditors 51,000 & & Furniture \(\quad 45,000\) & 3,87,000 \\
\hline Loan 80,000 & & & \\
\hline Realisation Exp. \(\quad\) 6,000 & 1,37,000 & & \\
\hline To Profit on Realization: & & & \\
\hline \(X \quad 6,000\) & & & \\
\hline Y 6,000 & 12,000 & & \\
\hline & 5,21,000 & & 5,21,000 \\
\hline
\end{tabular}

\section*{Notes}

Partner's Capital Account
\begin{tabular}{|l|r|r|l|r|r|}
\hline Particulars & \(\mathbf{X}(\boldsymbol{₹})\) & \(\mathbf{Y}\) (₹) & Particulars & \(\mathbf{X}(\boldsymbol{₹})\) & \(\mathbf{Y}(\boldsymbol{₹})\) \\
\hline \multirow{4}{*}{ To Bank A/c } & \(1,36,000\) & \(1,36,000\) & By Balance b/d & \(1,20,000\) & \(1,20,000\) \\
& & & By Reserve fund & 10,000 & 10,000 \\
& & & By Profit on realisation A/c & 6,000 & 6,000 \\
\cline { 3 - 6 } & & \(\mathbf{1 , 3 6 , 0 0 0}\) & \(\mathbf{1 , 3 6 , 0 0 0}\) & & \(\mathbf{1 , 3 6 , 0 0 0}\) \\
\(\mathbf{1 , 3 6 , 0 0 0}\) \\
\hline
\end{tabular}

Bank Account
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To balance b/d & 22,000 & By Realization A/c & \(1,37,000\) \\
To Realization A/c & \(3,87,000\) & By X's Capital A/c & \(1,36,000\) \\
& & By Y's Capital A/c & \(1,36,000\) \\
\cline { 2 - 4 } & \(\mathbf{4 , 0 9 , 0 0 0}\) & & \(\mathbf{4 , 0 9 , 0 0 0}\) \\
\hline
\end{tabular}

Example: The following is the Balance Sheet of Ram and Gopal as on 31 \({ }^{\text {st }}\) March, 2006.
\begin{tabular}{|lr|r|l|r|}
\hline Liabilities & \(₹\) & Assets & \(₹\) \\
\hline Creditors & 38,000 & Bank & 11,500 \\
Mrs. Ram's Loan & & 10,000 & Stock & 6,000 \\
Mrs. Gopal's Loan & & 15,000 & Debtors & 19,000 \\
Reserve & 5,000 & Furniture & 4,000 \\
Capital & & Plant & 28,000 \\
A & & Investment & 10,000 \\
B & 10,000 & 8,000 & 18,000 & Profit and Loss A/c \\
& & \(\mathbf{8 6 , 0 0 0}\) & & 7,500 \\
& & & \(\mathbf{8 6 , 0 0 0}\) \\
\hline
\end{tabular}

The firm was dissolved on \(31^{\text {st }}\) March, 2006 on the following terms:
1. A agreed to take the Investments at ₹ 8,000 and to pay off Mrs. Ram's Loan.
2. Other Assets were realized as follows:
\begin{tabular}{lr} 
& ₹ \\
Stock & 5,000 \\
Debtors & 18,500 \\
Furniture & 4,500 \\
Plant & 25,000
\end{tabular}
3. Expenses on realization amounted to ₹ 1,600 .
4. Creditors agreed to accept \(₹ 37,000\).

The profits and losses were shared in the ratio of 2:1. You are required to prepare realization A/c, Partner's capital A/c and Bank A/c.

\section*{Realization Account}
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Stock & 6,000 & By Creditors & 38,000 \\
To Debtors & 19,000 & By Mrs. Ram's Loan & 10,000 \\
To Furniture & 4,000 & By Mrs. Gopal's Loan & 15,000 \\
To Plant & 28,000 & By Ram's Capital A/c & 8,000 \\
To Investment & 10,000 & (Investment) & \\
To Ram's Capital A/c & & By Bank & \\
(Mrs. Ram's Loan) & 10,000 & (Stock) & 5,000 \\
To Bank (Expenses) & 1,600 & (Debtors) & 18,500 \\
To Bank (Creditors) & 37,000 & (Furniture) & 4,500 \\
To Bank (Mrs. Gopal's Loan) & 15,000 & (Plant) & 25,000 \\
& & By Loss on realization A/c & 6,600 \\
& & Ram's Capital & 4400 \\
\hline
\end{tabular}

Partner's Capital Account
\begin{tabular}{|l|r|r|l|r|r|}
\hline Particulars & \begin{tabular}{r} 
Ram \\
\((\boldsymbol{₹})\)
\end{tabular} & \begin{tabular}{r} 
Gopal \\
\((\boldsymbol{₹})\)
\end{tabular} & Particulars & \begin{tabular}{r} 
Ram \\
\((\boldsymbol{₹})\)
\end{tabular} & \begin{tabular}{r} 
Gopal \\
\((\mathbf{₹})\)
\end{tabular} \\
\hline To Realization A/c & 8,000 & - & By Balance b/d & 10,000 & 8,000 \\
To Profit \& Loss A/c & 5,000 & 2,500 & By Mrs. Ram's Loan A/c & 10,000 & - \\
To Loss on realization A/c & 4,400 & 2,200 & By Reserve A/c & 3,333 & 1,667 \\
To Bank A/c & 5,933 & 4,967 & & & \\
\cline { 2 - 3 } & \(\mathbf{2 3 , 3 3 3}\) & \(\mathbf{9 , 6 6 7}\) & & \(\mathbf{2 3 , 3 3 3}\) & \(\mathbf{9 , 6 6 7}\) \\
\hline
\end{tabular}

Bank Account
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(\mathbf{₹}\) & Particulars & \(₹\) \\
\hline To balance b/d & 11,500 & By Creditors A/c & 37,000 \\
To Realization A/c & 53,000 & By Mrs. Gopal's Loan & 15,000 \\
& & By Realization A/c (Cash Exp.) & 1,600 \\
& & By Ram's Capital A/c & 5,933 \\
\cline { 4 - 4 } & & By Gopal's Capital A/c & 4,967 \\
\cline { 4 - 4 } & \(\mathbf{6 4 , 5 0 0}\) & & \(\mathbf{6 4 , 5 0 0}\) \\
\hline
\end{tabular}

Take any practical example of a firm dissolution from the market and analyse it.

\section*{Notes \\ Self Assessment}

Multiple Choice Questions:
7. Which account is debited at the time of dissolution of a firm when assets are transferred?
(a) Revaluation Account
(b) Realisation Account
(c) Profit and Loss Adjustment A/c
(d) None of the above.
8. When assets are realised who is paid first?
(a) Partners Capital A/c
(b) Partners Loan A/c
(c) Creditors
(d) Expenses relating to dissolution

\subsection*{9.3 Garner v/s Murray Rule Including Insolvency of Firm}

In case one partner or more than one partners are insolvent and the remaining (solvent) are required to compensate the loss (deficiency) of insolvent partner/s, the problem arises as how to compensate that deficiency or in what ratio the solvent partners are required to compensate.

This deficiency is to be compensated in two ways: (1) This deficiency is to be shared by solvent partners in their profit sharing ratio like other business losses, or (2) to be shared according to Garner Vs. Murray rule. According to this rule, the loss is to be shared among the solvent partners in the ratio of their opening capitals.

Examples illustrating the ruling in Garner v. Murray:
1. A, B and C were partners, sharing profits and losses equally, with capital contribution of \(₹ 30,000\), ₹ 15,000 and \(₹ 3,000\), respectively. On dissolution it is found that, after paying the debts of the firm and advances made by the partners, the assets are ₹ 21,000 . Thus, the deficiency comes to ₹ 27,000 (i.e., total capital - assets), which is to be met by the partners equally. Now the total assets available are ₹ 48,000 . This amount will be distributed rateably among the partners. However, in actual practice it will not be necessary for A and B to pay ₹ 9,000 each in cash but notional adjustment may be made so that C, whose capital contribution was only ₹ 3,000 will have to pay ₹ 6,000 . Now the total assets available for distribution between \(A\) and \(B\) would be \(₹ 21,000+6,000=₹ 27,000\), A getting ₹ 21,000 and \(B\) ₹ 6,000 .
2. Sometimes it so happens that one or more of the partners is insolvent and so cannot contribute anything towards the deficiency. Thus, in the above case if C is insolvent and nothing can be recovered from him, the assets will be distributed as follows: A and B will bring in their share of deficiency, increasing the assets from ₹ 21,000 to ₹ 39,000 . The total assets would be distributed between A and B in their capital ratio, i.e., 2:1. A will get \(₹ 26,000\) and B ₹ 13,000 . Thus, A on the whole will lose ₹ 13,000 and B ₹ 11,000 . This settlement of accounts is in accordance with the rule laid down in Garner v. Murray. From the calculations it is obvious that the remaining partners are suffering loss in accordance with the amount of capital contributed. Thus, A suffers more loss than B even though they are sharing profits and losses equally.
3. The principle enunciated above will also apply if C in the case mentioned in illustration above, though not insolvent, fails to contribute his share of the deficiency. Out of the total amount of \(₹ 21,000\), A will get \(₹ 17,000\) and \(B ₹ 4,000\). The court will pass a decree for \(₹ 4,000\) in favour of A against C and for ₹ 2,000 in favour of \(B\) against C.


Example: Long, Short and Thin were carrying on business in partnership sharing profits and losses in the ratio of \(3: 2: 1\) respectively. They decided to dissolve the firm on 31st December, 2006 on which date their Balance Sheet stood as follows:
\begin{tabular}{|lr|r|l|r|}
\hline Liabilities & & \(₹\) & Assets & \(₹\) \\
\hline Creditors & & 47,000 & Land \& Buildings & 57,000 \\
Long's Loan A/c & & 10,000 & Stock & 50,000 \\
Capital Accounts: & & Debtors & 50,000 \\
Long & 90,000 & & Cash & 3,000 \\
Short & 10,000 & & Profit \& Loss A/c & 1,500 \\
Thin & 10,000 & \(1,10,000\) & Short's Current A/c & 2,000 \\
Long's Current A/c & & 1,500 & Thin's Current A/c & 5,000 \\
\hline & \(\mathbf{1 , 6 8 , 5 0 0}\) & & \(\mathbf{1 , 6 8 , 5 0 0}\) \\
\hline
\end{tabular}

Land and Buildings were sold for ₹ 40,000 and Stock and Debtors realized ₹ 30,000 and \(₹ 42,000\) respectively. The Goodwill was sold for ₹ 600 , the expenses of realization amounted to \(₹ 1,200\). Thin is insolvent and a final dividend of 50 paise a rupee is received from his estate in full settlement.

Prepare the necessary accounts closing the books of the firm applying the ruling given in Garner Vs. Murray.

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\section*{Solution:}

\section*{Realization Account}
\begin{tabular}{|l|r|l|r|}
\hline Particulars & ₹ & Particulars & ₹ \\
\hline To Sundry Assets: & & By Sundry Creditors: & 47,000 \\
Land \& Buildings & 57,000 & By Cash A/c & \\
Stock & 50,000 & Sale of Land \& Building & 40,000 \\
Debtors & 50,000 & Stock & 30,000 \\
To Cash (Expenses) & 1,200 & Debtors & 42,000 \\
To Cash (Sundry creditors) & 47,000 & Goodwill & 600 \\
& & By Loss on Realization: & \\
& & Long & 22,800 \\
& & Short & \\
& & Thin & \(\mathbf{1 5 , 2 0 0}\) \\
& \(\mathbf{2 , 0 5 , 2 0 0}\) & & 45,600 \\
\hline & & & \(\mathbf{2 , 0 5 , 2 0 0}\) \\
\hline
\end{tabular}

\section*{Notes}

Partner's Capital Accounts
\begin{tabular}{|l|r|r|r|l|r|r|r|}
\hline Particulars & \begin{tabular}{r} 
Long \\
(₹)
\end{tabular} & \begin{tabular}{r} 
Short \\
(₹)
\end{tabular} & \begin{tabular}{r} 
Thin \\
(₹)
\end{tabular} & Particulars & \begin{tabular}{r} 
Long \\
(₹)
\end{tabular} & \begin{tabular}{r} 
Short \\
(₹)
\end{tabular} & \begin{tabular}{r} 
Thin \\
(₹)
\end{tabular} \\
\hline To Profit \& Loss A/c & 750 & 500 & 250 & By Balance b/d & 90,000 & 10,000 & 10,000 \\
To Short's Current & - & 2,000 & - & By Long's Current A/c & 1,500 & - & - \\
A/c & - & - & 5,000 & By Cash A/c & - & 7,842 & 1,425 \\
To Thin's Current A/c & 22,800 & 15,200 & 7,600 & By Long's Capital A/c & - & - & 1,283 \\
To Loss on Realization & 1,283 & 142 & - & By Short's Capital A/c & - & --142 \\
To Thin's Capital & 66,667 & - & - & & & & \\
To Cash A/c & & & & & \(\mathbf{9 1 , 5 0 0}\) & \(\mathbf{1 7 , 8 4 2}\) & \(\mathbf{1 2 , 8 5 0}\) \\
\hline
\end{tabular}

\section*{Cash Account}
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Balance & 3,000 & By Realization ( Expenses) & 1,200 \\
To Realization (Sale of assets) & \(1,12,600\) & By Sundry Creditors & 47,000 \\
To Shorts' Capital & 7,842 & By Long's Loan A/c & 10,000 \\
To Thin's Capital & 1,425 & By Long's Capital A/c & 66,667 \\
\hline & \(\mathbf{1 , 2 4 , 8 6 7}\) & & \(\mathbf{1 , 2 4 , 8 6 7}\) \\
\hline
\end{tabular}

Example: The following is the Balance sheet of A, B and C on December 31, 2007:
\begin{tabular}{|l|r|l|r|}
\hline Liabilities & \(₹\) & \multicolumn{1}{|c|}{ Assets } & \(₹\) \\
\hline Creditors & 20,000 & Cash & 6,000 \\
Reserve Fund & 15,000 & Stock & 20,000 \\
A's Capital & 25,000 & Plants \& Tools & 20,000 \\
B's Capital & 15,000 & Sundry Debtors & 10,000 \\
& & Bills Receivable & 10,000 \\
& & C's Capital Overdrawn & 9,000 \\
\cline { 4 - 4 } & \(\mathbf{7 5 , 0 0 0}\) & & \(\mathbf{7 5 , 0 0 0}\) \\
\hline
\end{tabular}

C is insolvent but his estate pays ₹ 2,000 . It is decided to wind up the partnership. The assets realized as follows:
\begin{tabular}{lr} 
(₹) \\
Sundry Debtors & 7,500 \\
Bills Receivable & 7,000 \\
Stock & 16,000 \\
and Plant \& Tools & 14,000 \\
The cost of winding up came to & 2,500
\end{tabular}

Give accounts to close the books of the firm taking the capitals as fixed.

Solution:
Dissolution A/c
\begin{tabular}{|l|r|l|r|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Stock & 20,000 & By Sundry Debtors & & 7,500 \\
" Plant \& Tools & 20,000 & " Bills Receivable & & 7,000 \\
" Sundry Debtors & 10,000 & " Stock & & 16,000 \\
" Bills Receivables & 10,000 & " Plant \& Tools & & 14,000 \\
" Cash (cost of winding up) & 2,500 & " Loss on Dissolution & & \\
& & A & 6,000 & \\
& & B & 6,000 & \\
& & C & \(\underline{6,000}\) & 18,000 \\
\hline & \(\mathbf{6 2 , 5 0 0}\) & & & \(\mathbf{6 2 , 5 0 0}\) \\
\hline
\end{tabular}

Partner's Current A/c
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Particulars & \[
\begin{aligned}
& \text { A } \\
& \text { (₹) }
\end{aligned}
\] & \[
\begin{gathered}
\hline \text { B } \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{aligned}
& \text { C } \\
& \text { (₹) }
\end{aligned}
\] & Particulars & \[
\begin{aligned}
& \text { A } \\
& \text { (₹) }
\end{aligned}
\] & \[
\begin{gathered}
\text { B } \\
\text { (₹) }
\end{gathered}
\] & \[
\begin{aligned}
& \text { C } \\
& \text { (₹) }
\end{aligned}
\] \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
To Loss on Dissolution \\
To C's Capital A/c \\
To C's Current A/c(1)
\end{tabular}} & \[
\begin{array}{r}
\hline 6,000 \\
- \\
5,000
\end{array}
\] & \[
\begin{array}{r}
\hline 6,000 \\
- \\
3,000
\end{array}
\] & \[
\begin{aligned}
& \hline \text { 6,000 } \\
& 9,000
\end{aligned}
\] & \multirow[t]{2}{*}{\begin{tabular}{l}
By Reserve Fund \\
By Cash A/c \\
By A's Current A/c \\
By B's Current A/c \\
By Cash A/c
\end{tabular}} & 5,000
-
-
-
6,000 & 5,000
-
-
-
4,000 & \[
\begin{aligned}
& \hline 5,000 \\
& 2,000 \\
& 5,000 \\
& 3,000
\end{aligned}
\] \\
\hline & 11,000 & 9,000 & 15,000 & & 11,000 & 9,000 & 15,000 \\
\hline
\end{tabular}

Cash A/c
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Balance b/d & 6,000 & By Expenses of winding up & \\
To C's Current A/c & 2,000 & By Creditors A/c & 2,500 \\
To A's Current A/c & 6,000 & By A's Capital A/c & 20,000 \\
To B's Current A/c & 4,000 & By B's Capital A/c & 25,000 \\
To Realization A/c & & & 15,000 \\
(Dissolution A/c) & & & \\
Sundry Debtors A/c & 7,500 & & \\
Bills Receivable A/c & 7,000 & & \\
Stock A/c & 16,000 & & \(\mathbf{6 2 , 5 0 0}\) \\
\hline Plants \& Tools A/c & 14,000 & & \\
\cline { 2 - 2 } & \(\mathbf{6 2 , 5 0 0}\) & & \\
\hline
\end{tabular}

\section*{Notes}

\section*{Self Assessment}

Multiple Choice Questions:
9. If a partner is insane, partnership firm is dissolved, explain which is the mode of dissolution:
(a) Dissolution by Agreement
(b) Compulsory Dissolution
(c) Dissolution by Court
(d) Dissolution by Notice.
10. The Partnership firm is dissolved if number of its partners exceeds
(a) 5
(b) 10
(c) 20
(d) 50
11. The firm is dissolved if it deals is:
(a) Unlawful business
(b) Lawful business
(c) Lawful in the beginning but subsequently becomes illegal.
(d) None of the above.

\subsection*{9.4 Piecemeal Distribution}

As we discussed in the previous section it was assumed that all the assets were realised on the date of dissolution and accounts settled on the same date. However the process of realizing the assets takes a long time and cash is distributed as and when it is realized. Such a process of gradual distribution of money is known as "Piecemeal Distribution".

The following are the key methods for distribution of cash under piecemeal distribution:
1. Proportionate Capital Method: If the capitals of the partners are in the ratio of their profit sharing arrangement, then each of them is paid out according to his capital ratio at each distribution. If the capitals of the partners are not in the profit sharing ratio then the first cash available (after making payment of outside liabilities and loans due to the partners) for distribution amongst the partners should be paid to those partners whose capitals are more than their profit sharing ratio so as to bring their capitals to their profit sharing levels. After this the cash available is distributed amongst all partners according to their profit sharing ratio.

The unpaid balance of capital accounts will represent loss on realisation and this loss will be exactly in their profit sharing ratio.


Example: A, B and C are partners having capital of ₹ 20,000; ₹ 10,000 and \(₹ 5,000\). The profit sharing ratio of \(A, B\) and \(C\) is 2:2:1 respectively. Calculate the surplus capital.

\section*{Statement Showing Surplus Capital}
\begin{tabular}{|l|c|c|c|}
\hline & A & B & C \\
\hline Profit sharing ratio & 2 & 2 & 1 \\
\cline { 2 - 4 } \begin{tabular}{l} 
Actual Capital \\
\begin{tabular}{l} 
Capital's of partner's on the basis of C's \\
capital (C is having the least capital) \\
Surplus Capital
\end{tabular}
\end{tabular} \(\operatorname{10,000}\) & 20,000 & 5,000 \\
\cline { 2 - 4 } & 10,000 & 10,000 & 10,000 \\
\hline
\end{tabular}

Note: After paying the surplus capital to A, the remaining capital should be distributed among all the partners among their capital sharing ratio of \(2: 2: 1\).
2. Maximum Loss Method: An alternative method of piecemeal distribution amongst partner is to calculate the maximum possible loss on every realisation after the outside liabilities and the partners loan has been paid. The amount available for distribution amongst partners is compared with the total amount of capital payable to the partners and the maximum loss is ascertained on the assumption that in future assets will not realize any amount. The maximum possible loss so ascertained is deducted from the capital balances of the partners in their profit and loss sharing ratio and the balance left in the capital account after deducting the maximum possible loss will be the amount payable to the partner.

If a partner's share of maximum possible loss is more than the amount standing to the credit of his capital account, he should be treated as insolvent and his deficiency should be debited to the capital accounts of the solvent partners in the proportion of their capitals which stood on the dissolution date as stated under the Garner V/s. Murray Rule. The amount standing to the credit of the partners after debiting their share of maximum loss and their share of insolvent partners deficiency will be equal to the cash available for the distribution amongst the partners.

This process of maximum possible loss is repeated on each realisation till all the assets are disposed.

Example: The partners A, B and C have called you to assist them in winding up the affairs of their partnership on 30th June, 2005. Their Balance Sheet as on that date is given below:
\begin{tabular}{|lr|r|l|r|}
\hline Liabilities & \multicolumn{1}{|c|}{\(₹\)} & Assets & \(₹\) \\
\hline Sundry Creditors & & 17,000 & Cash at Bank & 6,000 \\
Capital Accounts: & & & Sundry Debtors & 22,000 \\
A & & Stock in trade & 14,000 \\
B & & Plant and Equipment & 99,000 \\
C & 45,000 & & Loan-A & 12,000 \\
& 31,500 & \(1,43,500\) & & Loan-B \\
\cline { 5 - 5 } & & & \(\mathbf{1 , 6 0 , 5 0 0}\) \\
\hline
\end{tabular}

Notes (1) The partners share profit and losses in the ratio of \(5: 3: 2\).
(2) Cash is distributed to the partners at the end of each month.
(3) A summary of liquidation transactions are as follows:

July 2005
₹ 16,500 - collected from Debtors; balance is uncollectable.
₹ 10,000 - received from sale of entire stock.
₹ 1,000 - liquidation expenses paid.
₹ 8,000 - cash retained in the business at the end of the month.

\section*{August 2005}
₹ 1,500 - liquidation expenses paid. As part payment of his Capital, C accepted apiece of equipment for ₹ 10,000 (book value ₹ 4,000 ).
₹ 2,500 - cash retained in the business at the end of the month.

\section*{September 2005}
₹ 75,000 - received on sale of remaining plant and equipment.
₹ 1,000 - liquidation expenses paid. No cash retained in the business.
Prepare a schedule of cash payments as of September 30, showing how the cash was distributed.
Solution:
Statement showing Distribution of Cash
\begin{tabular}{|c|c|c|c|c|c|}
\hline & \multicolumn{3}{|c|}{Creditors} & \multicolumn{2}{|l|}{Capitals} \\
\hline & ₹ & ₹ & A(₹) & B( \()^{\text {) }}\) & C(₹) \\
\hline \begin{tabular}{l}
Balance Due \\
July \\
Balance available \\
Realisation less expenses and cash retained \\
Amount available and paid
\end{tabular} & \[
\begin{aligned}
& 6,000 \\
& 17,500 \\
& 23,500
\end{aligned}
\] & \[
\begin{aligned}
& 17,000 \\
& \\
& 17,000
\end{aligned}
\] & 55,000 & 37,500 & \[
31,500
\]
\[
6,500
\] \\
\hline \begin{tabular}{l}
Balance due \\
August \\
Opening balance \\
Expenses paid and balance carried forward \\
Available for distribution \\
Cash paid to ' B ' and Equipment given to C .
\end{tabular} & \[
\begin{aligned}
& 8,000 \\
& 4,000 \\
& \hline 4,000
\end{aligned}
\] & - & 55,000 & \begin{tabular}{l}
\[
37,500
\] \\
4,000
\end{tabular} & \[
25,000
\]
10,000 \\
\hline & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|l|c|c|c|c|c|} 
(Excess paid to 'C' ₹ 7,333) & & & & \\
September & & & 55,000 & 33,500 & 15,000 \\
Opening balance & 2,500 & & & & \\
Amount realised less \\
expenses & & & & & \\
Amount paid to partners & 74,000 & & & & \\
\cline { 2 - 2 } & & 76,500 & & 41,500 & 25,400
\end{tabular}

Working Note:
(i) Highest Relative Capital Basis
\begin{tabular}{|llll|}
\hline & \begin{tabular}{l}
A \\
F
\end{tabular} & \begin{tabular}{l}
B \\
\(₹\)
\end{tabular} & \begin{tabular}{c}
C \\
\(₹\)
\end{tabular} \\
\hline Scheme of payment for July & & & \\
Balance of Capital Accounts & 67,000 & 45,000 & 31,500 \\
Less: Loans & 12,000 & 7,500 & \\
\cline { 2 - 4 } & 55,000 & 37,500 & 31,500 \\
\hline Profit sharing ratio & 5 & 3 & 2 \\
Capital Profit sharing ratio & 11,000 & 12,500 & 15,750 \\
Capital in profit sharing ratio taking & & & \\
A's Capital as base & 55,000 & 33,000 & 22,000 \\
Excess of C's Capital and B's Capital & & 4,500 & 9,500 \\
Excess of C's Capital over B & & \((9,500-3,000)\) & 6,500 \\
\hline
\end{tabular}
(ii) Scheme of distribution of available cash:
\begin{tabular}{|llll|}
\multicolumn{1}{l}{} & A & B & C \\
\hline Scheme of payment for September & & & \\
Balance of Capital Accounts & 55,000 & 33,500 & 15,000 \\
Profit Sharing Ratio & 5 & 3 & 2 \\
Capital/Profit sharing Ratio & 11,000 & 11,167 & 7,500 \\
Capital in profit sharing ratio taking & & & \\
C's Capital as base & 37,500 & 22,500 & 15,000 \\
Excess of A's Capital and B's Capital & 17,500 & 11,000 & \\
Excess in Profit Sharing Ratio & 3,500 & 3,667 & \\
Excess in profit sharing Ratio taking & & & \\
A's excess as base & 17,500 & 10,500 & \\
Excess & - & 500 & - \\
Payment ₹ 500 & & \((500)\) & Contd...
\end{tabular}
\begin{tabular}{l|llll|}
\hline Notes & Balance of Excess & 17,500 & 10,500 & \\
Payment ₹ 28,000 & \((17,500)\) & \((10,500)\) & \\
& Balance & 37,500 & 22,500 & 15,000 \\
Payment (₹76,500 - ₹28,500) ₹48,000 & \((24,000)\) & \((14,400)\) & \((9,600)\) \\
Loss & 13,500 & 8,100 & 5,400 \\
\cline { 2 - 5 } & Total Payment ₹ 76,500 & 41,500 & 25,400 & 9,600 \\
\hline
\end{tabular}

Example: The following is the Balance Sheet of A, B, C on 31st December, 2005 when they decided to dissolve the partnership:
\begin{tabular}{|l|r|l|r|}
\hline Liabilities & \(₹\) & Assets & \(₹\) \\
\hline Creditors & 2,000 & Sundry Assets & 48,500 \\
A's Loan & 5,000 & Cash & 500 \\
Capital Accounts : & & & \\
A & 15,000 & & \\
B & 18,000 & & \\
C & 9,000 & & \(\mathbf{4 9 , 0 0 0}\) \\
\hline
\end{tabular}

The assets realised the following sums in installments:
\begin{tabular}{ll} 
I & 1,000 \\
II & 3,000 \\
III & 3,900 \\
IV & 6,000 \\
V & 20,100 \\
& 34,000
\end{tabular}

The expenses of realisation were expected to be ₹ 500 but ultimately amounted to ₹ 400 only.
Show how at each stage the cash received should be distributed between partners. They share profits in the ratio of \(2: 2: 1\).

\section*{Solution:}

First of all, the following table will be constructed to show the amounts available for distribution among the various interests:

Statement showing Realisation and Distribution of Cash Payments
\begin{tabular}{|l|l|l|l|l|}
\hline & \begin{tabular}{c} 
Realisation \\
\(₹\)
\end{tabular} & \begin{tabular}{c} 
Creditors \\
\(₹\)
\end{tabular} & \begin{tabular}{c} 
Partners' Loan \\
\(₹\)
\end{tabular} & \begin{tabular}{c} 
Partners' Capitals \\
\(₹\)
\end{tabular} \\
\cline { 2 - 5 } \begin{tabular}{c} 
1. After taking into account \\
cash balance and amount \\
set aside for expenses
\end{tabular} & 1,000 & 1,000 & - & - \\
2. & 3,000 & 1,000 & 2,000 & - \\
2. & & & \\
Contd...
\end{tabular}
\begin{tabular}{|l|l|l|l|l|} 
3. & 3,900 & - & 3,000 & 900 \\
4. & 6,000 & - & - & 6,000 \\
\begin{tabular}{l} 
5. Including saving \\
in expenses
\end{tabular} & 20,100 & - & - & 20,100 \\
\hline & 34,000 & 2,000 & 5,000 & 27,000 \\
\hline
\end{tabular}

To ascertain the amount distributable out of each instalment realised among the partners, the following table will be constructed:

Statement of Distribution on Capital Account
\begin{tabular}{|c|c|c|c|c|}
\hline & Total ₹ & \[
\begin{aligned}
& \text { A } \\
& \text { ₹ }
\end{aligned}
\] & \[
\begin{aligned}
& \text { B } \\
& \text { ₹ }
\end{aligned}
\] & C \\
\hline \begin{tabular}{l}
(1) Calculation to determine the mode of distribution of ₹ 900 \\
Balance \\
Less: Possible loss, should remaining assets prove to be worthless
\end{tabular} & \[
\begin{aligned}
& 42,000 \\
& 41,100
\end{aligned}
\] & 15,000
16,440 & 18,000
16,440 & 9,000
8,220 \\
\hline \begin{tabular}{l}
Deficiency of A's capital written off against those of \(B\) and \(C\) in the ratio of their capital, 18,000 : 9,000 (Garner vs. Murray) \\
Manner in which the first ₹ 900 should be distributed \\
(2) Distribution of ₹ 6,000 \\
Balance after making payment of amount shown in step (1) Less: \\
Possible Loss assuming remaining asset to be valueless \\
Balance available and to be distributed
\end{tabular} & +900


41,100
35,100
6,000 & \(-1,440\)

15,000
14,040
960 & \begin{tabular}{l}
\(+1,560\) \\
960 \\
\(+600\) \\
17,400 \\
14,040 \\
3,360
\end{tabular} & \begin{tabular}{l}
+780 \\
480 \\
+300 \\
\hline 8,700 \\
\hline 7,020 \\
1,680
\end{tabular} \\
\hline \begin{tabular}{l}
(3) Distribution of ₹ \(\mathbf{2 0 , 1 0 0}\) \\
Balance after making payment of amount shown in step (2) \\
Less: Possible loss, assuming remaining assets to be valueless
\end{tabular} & 35,100

15,000 & 14,040
6,000 & 14,040
6,000 & 7,020
3,000 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Notes & Manner of distribution of ₹ 20,100 & 20,100 & 8,040 & 8,040 & 4,020 \\
\hline & Summary: & & & & \\
\hline & Balance & 42,000 & 15,000 & 18,000 & 9,000 \\
\hline & Total amounts paid & 27,000 & 9,000 & 12,000 & 6,000 \\
\hline & Loss & 15,000 & 6,000 & 6,000 & 3,000 \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
12. A process of gradual distribution of money is known as \(\qquad\)
13. The unpaid balance of \(\qquad\) will represent loss on realisation and this loss will be exactly in their profit sharing ratio.
14. The amount standing to the credit of the partners after debiting their share of ............................ and their share of insolvent partners deficiency will be equal to the cash available for the distribution amongst the partners.
15. If a partner's share of maximum possible loss is more than the amount standing to the credit of his capital account, he should be treated as \(\qquad\)

\subsection*{9.5 Summary}
- The dissolution of a firm implies the discontinuance of the partnership business and separation of economic relation between the partners.
- In the case of a dissolution of a firm, the firm closes its business altogether and realizes all its assets and settles all liabilities.
- The payment is made to the creditors, first out of profits and assets realized, next out of the contributions made by the partners in their profit sharing ratio.
- When the final payment is made to the partners for their due share, the books of the firm are closed.
- The Realization Account is prepared to record the transactions relating to sale and realization of assets and settlement of creditors.
- Any profit or loss arising out of this process is shared by the partners in their profit sharing ratio.
- Partners are paid off in the final settlement, if any sum is due to them. At the end Cash/ Bank Account is closed by making payment to partners.
- The process of realizing the assets takes a long time and cash is distributed as and when it is realized.
- Such a process of gradual distribution of money is known as "Piecemeal Distribution".
- If the capitals of the partners are in the ratio of their profit sharing arrangement, then each of them is paid out according to his capital ratio at each distribution.
- Maximum Loss Method is an alternative method of piecemeal distribution amongst partner is to calculate the maximum possible loss on every realisation after the outside liabilities and the partners loan has been paid.

\subsection*{9.6 Keywords}

Dissolution: Dissolution means the undoing or breaking of a bond tie.
Realization \(A / c\) : The account in which all the assets and liabilities of the dissolved firm are transferred.

Revaluation \(A / c\) : Revaluation account is prepared when the firm is constituted.

\subsection*{9.7 Review Questions}
1. Dissolution of partnership does not demand dissolution of the firm but dissolution of the firm means the dissolution of partnership. Discuss.
2. A, B, C and D are partners sharing \(4: 3: 2: 1\). Their position statement was as follows:
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \multicolumn{1}{c|}{\(₹\)} & \multicolumn{1}{c|}{ Assets } & \multicolumn{1}{c|}{\(₹\)} \\
\hline Bank Loan & 20,000 & Cash & 1,500 \\
Creditors & 40,000 & Building & 44,000 \\
A's Capital & 30,000 & Stock & 60,000 \\
B's Capital & 20,000 & C's Capital & 3,500 \\
& & D's Capital & 1,000 \\
\cline { 2 - 3 } & \(\mathbf{1 , 1 0 , 0 0 0}\) & & \(\mathbf{1 , 1 0 , 0 0 0}\) \\
\hline
\end{tabular}

The firm is dissolved. All assets realized ₹ 82,000 . All outside liabilities paid \(₹ 58,500\) in full satisfaction. Outstanding creditors are also paid ₹ 500 . The expenses of dissolution are \(₹ 600\). D becomes insolvent and \(C\) paid only ₹ 3,000. Prepare ledger accounts to close the books of the firm.
3. \(D, E\) and \(F\) were partners. Their profit sharing ratio was \(3: 2: 1\). They dissolved their firm. The Balance Sheet on that date was as follows:
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Liabilities } & \(₹\) & \multicolumn{1}{c|}{ Assets } & \(₹\) \\
\hline D's Capital & 34,000 & Plant & 30,000 \\
E's Capital & 23,000 & Machine & 13,850 \\
F's Capital & 1,500 & Stock and Debtors & 25,200 \\
E's Loan & 1,000 & Cash & 6,550 \\
Bills Payable & 7,550 & & \\
Profit \& Loss Account & 8,550 & & \(\mathbf{7 5 , 6 0 0}\) \\
\hline
\end{tabular}

Assets were sold for ₹ 50,100 . Realization expenses were ₹ 300 . F became insolvent and only ₹ 512 were received from him.

Prepare necessary ledger accounts following the rule of Garner vs. Murray's Case.

Notes 4. A, B and C sharing profit as 6:2:2 decided to dissolve their firm on 31-12-2007 when their position was as follows:
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Liabilities} & ₹ & Assets & & ₹ \\
\hline \multicolumn{6}{|l|}{Capital:} \\
\hline A & 8,250 & & Sundry & & 5,100 \\
\hline B & 3,000 & & Stock & & 2,340 \\
\hline C & 2,100 & 13,350 & Furniture & & 300 \\
\hline \multicolumn{2}{|l|}{Sundry creditors} & 1,800 & Debtors & 7,260 & \\
\hline \multirow[t]{3}{*}{Loan} & & 450 & Less provision for doubtful debts & 360 & 6,900 \\
\hline & & & Cash in hand & & 960 \\
\hline & & 15,600 & & & 15,600 \\
\hline
\end{tabular}

It was agreed that:
(i) A is to take furniture at ₹ 240 debtors amounting to ₹ 6,000 at ₹ 5,160 and also the creditors at their book value.
(ii) B agreed to take over stock at ₹ 2,100 and a part of the sundry assets at ₹ 2,160 (being book value less \(10 \%\) ).
(iii) C agreed to take remaining sundry assets at \(90 \%\) if their book value less ₹ 30 as allowance. He also assumed the responsibility for the payment of loan together with accrued interest of ₹ 9 (not recorded in the books).
(iv) Dissolution expenses amounted to ₹ 181.
(v) The remaining debtors were sold to a Debt collecting Agency at \(50 \%\) of the book value. Close the books of the firm with the help of ledger account.
5. \(\mathrm{P}, \mathrm{Q}\) and R Were partners in a firm sharing profits in the ratio of \(1: 2: 2\). Their Balance Sheet on \(31^{\text {st }}\) December 2006 was as follows:

Balance Sheet of P, Q and R as on \(31^{\text {st }}\) December 2006
\begin{tabular}{|l|r|l|r|}
\hline Liabilities & \begin{tabular}{r} 
Amount \\
(₹)
\end{tabular} & Assets & \begin{tabular}{r} 
Amount \\
\((\boldsymbol{₹})\)
\end{tabular} \\
\hline Accounts payable A/c & 15,000 & Land \& building A/c & 47,000 \\
Bank overdraft A/c & 12,000 & Office equipment A/c & 8,000 \\
Q's loan A/c & 18,000 & Stock A/c & 56,000 \\
Joint life insurance & & Accounts receivable A/c & 18,000 \\
Policy reserve & & 15,000 & Joint life insurance policy A/c \\
Capitals: & & Bank A/c & 15,000 \\
P & & & 16,000 \\
Q & 20,000 & & \\
R & 40,000 & & \\
& 40,000 & \(1,00,000\) & \\
\hline
\end{tabular}

Partners agreed to dissolve the firm on that date. You are given the following information about dissolution
(i) The Joint Life Insurance Policy was surrendered for ₹ 9,000
(ii) Office equipments was accepted by a creditor for ₹ 7,000 in full settlement. The remaining creditors were paid in full by cheques.
(iii) Assets realized as follows:
Land and Buildings
₹ 1,20 ,000
Stock
₹ 40,000
Accounts Receivable
(iv) Other liabilities were paid in full.
(v) Dissolution expenses amounted to ₹ 3,000

You are required to prepare realization account, bank account and capital of the partners.
6. The following Balance Sheet of A, B, C and D as on 31.3.2006 is presented to you.
\begin{tabular}{|l|r|l|r|}
\hline Liabilities & ₹ & Assets & \(₹\) \\
\hline Creditors & 20,000 & Sundry Assets & 30,000 \\
B's Loan & 5,000 & Cash at Bank & 1,000 \\
Capitals & & P \& L A/c & 15,000 \\
A's & 10,000 & Drawings: & \\
B's & 6,000 & B & 2,000 \\
C's & 6,000 & C & 2,000 \\
D's & 3,000 & & \\
\cline { 2 - 2 } & \(\mathbf{5 0 , 0 0 0}\) & & \(\mathbf{5 0 , 0 0 0}\) \\
\hline
\end{tabular}

They shared profits and losses in the ratio of \(2: 3: 3: 2\) respectively. The position of partners on the date of dissolution was as follows:
\begin{tabular}{|c|c|c|}
\hline Particulars & Private Estate & Private Liabilities \\
\hline A & 10,000 & 15,000 \\
\hline B & 20,000 & 6,000 \\
\hline C & 5,000 & 4,000 \\
\hline D & 8,000 & 9,000 \\
\hline
\end{tabular}

The assets realized ₹ 26,000 and expenses of dissolution came to ₹ 1,000 .
Prepare ledger accounts giving effect to the dissolution.
7. Explain Garner vs. Murray rule.
8. Write a short note on accounting treatment of goodwill.

Notes 9. A, B \& C sharing profits and losses in the proportion of 3:2:1. Their Balance Sheet was as follows:
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Liabilities } & Amount & \multicolumn{1}{c|}{ Assets } & Amount \\
\hline Creditors & 50,000 & Land and Buildings & 70,000 \\
\hline A's Loan A/c & 10,000 & Plant \& Machinery & 40,000 \\
\hline A's Capital A/c & 50,000 & Stock & 25,000 \\
\hline B's Capital A/c & 10,000 & Debtors & 20,000 \\
\hline C's Capital A/c & 40,000 & Cash & 5,000 \\
\hline Total & \(\mathbf{1 , 6 0 , 0 0 0}\) & & \(\mathbf{1 , 6 0 , 0 0 0}\) \\
\hline
\end{tabular}

The partnership is dissolved \& the Assets are realized as follows
\begin{tabular}{|l|r|}
\hline 1st Realisation & 40000 \\
\hline 2nd Realisation & 30000 \\
\hline 3rd Realisation & 54000 \\
\hline 4th Realisation & 7000 \\
\hline
\end{tabular}

Prepare a statement showing how the distribution should be made by using proportionate capital method
10. \(\mathrm{M}, \mathrm{N} \& \mathrm{O}\) were partners in a firm sharing profits and losses in the ratio of 2:1:1 respectively on the date of dissolution their balance sheet was as follows:
\begin{tabular}{|l|c|l|c|}
\hline \multicolumn{1}{|c|}{ Liabilities } & Amount & \multicolumn{1}{c|}{ Assets } & Amount \\
\hline Creditors & 28,000 & Sundry Assets & 80,000 \\
\hline L's Capital A/c & 20,000 & & \\
\hline M's Capital A/c & 20,000 & & \\
\hline O's Capital A/c & 12,000 & & \\
\hline Total & \(\mathbf{8 0 , 0 0 0}\) & & \(\mathbf{8 0 , 0 0 0}\) \\
\hline
\end{tabular}

The assets realized ₹ 68,000 \& it was received in installments of ₹ 28,000 , ₹ 20,000 \& ₹ 20,000 . Prepare a statement showing distribution of cash by using proportionate capital method.

\section*{Answers: Self Assessment}
1. firm
3. firm
5. Partnership
7. Realisation Account
9. Dissolution by Court
11. Unlawful business
13. capital accounts
15. insolvent
2. revaluation
4. compulsory dissolution
6. Partnership
8. Expenses relating to dissolution
10. 20
12. "Piecemeal Distribution"
14. maximum loss

\subsection*{9.8 Further Readings}

\author{
I.M. Pandey, Financial Management, Vikas Publishing, New Delhi \\ Khan and Jain, Management Accounting. \\ Nitin Balwani, Accounting \& Finance for Managers, Excel Books, New Delhi \\ Prasanna Chandra, Financial Management - Theory and Practice, Tata McGraw Hill, New Delhi (1994) \\ R.L. Gupta and Radhaswamy, Advanced Accountancy \\ S. Bhat, Financial Management, Excel Books, New Delhi \\ S.N. Maheswari, Management Accounting \\ V.K. Goyal, Financial Accounting, Excel Books, New Delhi
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\section*{Unit 10: Departmental Accounts}
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10.5 Summary
10.6 Keywords
10.7 Review Questions
10.8 Further Readings

\section*{Objectives}

After studying this unit, you will be able to:
- Prepare departmental accounting
- Record interdepartmental transfer at cost and invoice price

\section*{Introduction}

There may be a number of departments in a business organisation dealing in a different type of goods. For example, one department may be dealing in medicines, the other may be dealing in textiles, still another may be dealing in provisions, etc. To ascertain the profitability of each department it will be advisable to prepare separately Trading and Profit \& Loss Account of each Department at the end of the accounting year. The following are the key advantages of preparing the departmental accounts:
- Departmental accounts are helpful to compare the performance of one Department with that of another.
- It helps the business in formulating proper policies relating to the expansion of the business. New profitable lines of production of trading can be taken up while the existing lines of production or trading which are giving a loss can be closed down.
- It helps in appropriate rewarding or penalizing the Department employees on the basis of the results shown by them.

\subsection*{10.1 Basics for Preparing Inter-department Accounts}

The preparation of Departmental Trading and Profit \& Loss Account requires maintenance of proper subsidiary books having appropriate columns for different departments. This may be done by having columnar subsidiary books and a columnar ledger. Alternatively, a separate set of books may be kept for each department, including complete stock accounts of goods received from or transferred to other departments or as also sales.
For example, if a business has three departments A, B \& C, the subsidiary books such as Purchases Book, Purchases Returns Book, Sales Book, Sales Returns Books, etc., should have separate columns for each of the departments. Cash Book may also have columns for recording cash sales of each of the departments separately in case the volume of cash sales is quite large.


\section*{Self Assessment}

Fill in the blanks:
1. \(\qquad\) are helpful to compare the performance of one Department with that of another.
2. The preparation of Departmental Trading and Profit \& Loss Account requires maintenance of proper
3. A separate set of books may be kept for each department, including complete stock accounts of goods received from or transferred to other \(\qquad\) or as also sales.

\subsection*{10.2 Allocation of Expenses between Different Departments}

In order to compute the profit or loss made by each department, it is necessary that each department is charged with a proper share of the various business expenses. The following basis may be adopted for departmentalization of such expenses:
1. Expenses incurred specially for a particular department are charged directly to the concerned department.

For example, salary paid to each of the department manager.
2. Common expenses, which are charged as a whole should be distributed among the departments on some equitable basis.
For example, Rent is charged to different departments according to the floor area occupied by each department, having regard to any favourable location specially allocated to a department. Lighting and heating expenses are distributed on the basis of consumption of energy by each department and so on.

Notes 3. Expenses which are not easy to measure separately should be categorised on the basis of sales;

For example, selling expenses like discount, bad debts, selling commission, etc. are charged on the basis of sales; Administrative and other expenses, e.g., salaries of managers, directors, common advertisement expenses, depreciation on assets, etc. are allocated equally among all the departments that have benefited thereby.

Notes

\section*{Common Basis for Allocation of Expenses}
\begin{tabular}{|c|c|}
\hline Expenditure & Basis of Allocation \\
\hline 1. Selling Commission Sales & 1. Sales \\
\hline 2. Bad Debts Sales & 2. sales \\
\hline 3. Carriage Outwards & 3. Sales \\
\hline 4. Rent and Rates & 4. Floor Area Covered \\
\hline 5. Building Insurance & 5. Floor Area Covered \\
\hline 6. Building Repairs & 6. Floor Area Covered \\
\hline 7. Lighting & 7. Number of Lighting Points or Floor Area Covered \\
\hline 8. Depreciation & 8. Value of Assets or wages \\
\hline 9. Power & 9. Horse power of Machinery Installed \\
\hline 10. Insurance & 10. Average Stock, Value of Assets \\
\hline 11. Workmen's Compensation & 11. Wages \\
\hline 12. Labour Welfare Expenses & 12. Number of Employees \\
\hline 13. Advertising & 13. Sales or Space Allocated to each Department \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
4. Common expenses, which are charged as a whole should be distributed among the departments on some \(\qquad\) basis.
5. Expenses which are not easy to measure separately should be categorised on the basis of
\(\qquad\)
6. Depreciation should be charged on the basis of value of Assets or \(\qquad\)
7. Building Insurance should be charged on \(\qquad\)
8. Labour Welfare Expenses should be charged on the basis of \(\qquad\)

\subsection*{10.3 Types of Departments}

There are two types of departments:
- Dependant Departments
- Independent Departments
1. Dependant Departments: Dependent departments are those departments where the output of one department becomes the input for another department. Dependant departments transfer goods from one department to another department for further processing. These transfers may be done at cost or some pre-decided selling price.

\section*{20?}

Did \(u\) know? What is Transfer Price?
The price at which interdepartmental transfer is recorded which may be the cost or cost plus the margin of profit is known as transfer price.
2. Independent Department: Independent departments are the departments which work independently of each other and have negligible inter department transfer.

\section*{Notes Advantages of Departmental Accounting}

The main advantages of departmental accounting are as follows:
- Departmental accounting is helpful in measuring the performance of individual departments.
- The performance and growth potential of a department as compared to others can be evaluated.
- It helps the management to determine the justification of capital outlay in each department.
- Departmental accounting helps to calculate stock turnover ratio of each department separately, and thus the efficiency of each department can be revealed.

\section*{Self Assessment}

Fill in the blanks:
9. Dependent departments are those departments where the output of one department becomes the \(\qquad\) for another department.
10. The price at which interdepartmental transfer is recorded which may be the cost or cost plus the margin of profit is known as \(\qquad\)
11. \(\qquad\) departments are the departments which work independently of each other and have negligible inter department transfer.
12. Departmental accounting helps to calculate \(\qquad\) ratio of each department separately, and thus the efficiency of each department can be revealed.

\subsection*{10.4 Inter-departmental Transfer at Cost and Invoice Price}

In case of dependant departments the product of one department may be used as a raw material in another department. For example, a firm may have two departments, cloth and ready-made garments. The garments are made out of the cloth supplied by cloth department. Such supply of cloth is called interdepartmental transfer. The accounting entry in such cases involves debiting the department which receives goods or services, and crediting the department which supplies them.

Notes The interdepartmental transfer of goods or services may be done either:
(a) Cost Price
(b) Invoice Price

\subsection*{10.4.1 Transfer of Goods at Cost price}

When goods or services are supplied from one department to another at cost price, the corresponding entries to record the transfer will be made at cost price. This does not involve any adjustment at any stage.


Example: From the following Trial Balance of Ram and Shyam, prepare Departmental Trading and Profit and Loss Account for the year ending 31st March, 1998 and the Balance Sheet as at that date:

Stock (1st April, 1997)
Department X 3400
Department Y 2900
Purchases
Department X 7,180
Department Y 6,040
Sales
Department X 13,160
Department Y 10,250
Wages
Department X 1640
Department Y 540
Rent, Rates \& taxes 1878
\(\begin{array}{ll}\text { Sundry Expenses } & 720\end{array}\)
Salaries 600
Lighting \& Heating 420
Discount Allowed 444
Discount Received 130
Advertising 736
Carriage Inwards 468
Furniture \& Fittings 600
Machinery 4200
Sundry Debtors 1212
Sundry Creditors 3720
Capital 9532
Drawings 900
Cash at Bank 2014
The following additional information is available:
1. Inter-transfer of goods from \(X\) to \(Y\) department \(₹ 84,000\).
2. Rent, rates and taxes, sundry expenses, lighting and heating, Salaries and carriage are to be apportioned in the ration of \(2: 3\) between department X and Department Y .
3. Discount allowed and received are to be apportioned on the basis of departmental sales and purchases (excluding transfers)
4. Depreciation at \(10 \%\) per annum on Furniture and Fittings and on Machinery is to charged in the ration of \(3: 1\) between the department \(X\) and \(Y\).
5. Services rendered by department Y to department X are included in wages as \(₹ 1,00,000\).
6. Stock on 31st March, 1998 in X Department was worth ₹ \(33,48,000\) and in Y Department ₹ \(24,111,000\).

\section*{Solution:}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Particulars & Dep.
\[
X(₹)
\] & \[
\begin{gathered}
\text { Dep. Y } \\
\text { (₹) } \\
\hline
\end{gathered}
\] & Particulars & Dep.
\[
\text { X ( } \left.{ }^{( }\right)
\] & \begin{tabular}{l}
Dep. Y \\
(₹)
\end{tabular} \\
\hline To Opening Stock & 3,400 & 2,900 & By sales & 12,160 & 10,250 \\
\hline To Purchases & 7,080 & 6,040 & By transfer of goods & 84 & 100 \\
\hline To wages & 1,640 & 540 & By closing stock & 3,348 & 2,410 \\
\hline To transfer of goods & 100 & 84 & & & \\
\hline To carriage Inward & 312 & 156 & & & \\
\hline To gross profit c/d & 3,060 & & & & \\
\hline & & 3,040 & & & \\
\hline & 15,592 & 12,760 & & 15,592 & 12,760 \\
\hline To salary & 400 & 200 & By gross profit b/d & 3,060 & 3,040 \\
\hline To rent, rates and taxes & 1,252 & 626 & By discount received & 70 & 60 \\
\hline To sundry expenses & 480 & 240 & By Net loss & 252 & - \\
\hline To lighting and heating & 280 & 140 & & & \\
\hline To advertising & 368 & 368 & & & \\
\hline To Depreciation: & & & & & \\
\hline On Machinery & 315 & 105 & & & \\
\hline On Furniture & 45 & 15 & & & \\
\hline To Discount allowed & 242 & 202 & & & \\
\hline To net profit & - & 1,204 & & & \\
\hline & 3,382 & 3,100 & & 3,382 & 3,100 \\
\hline
\end{tabular}

Balance Sheet as on 31 \({ }^{\text {st }}\) March 1998
(₹ 000)


\subsection*{10.4.2 Transfer of Goods at Invoice Price}

When goods or services are supplied to another department at invoice price, the transfer has to be recorded at a invoice (selling) price is called transfer price. This obviously includes cost as well as profit, In such a situation, if the department to whom goods or services are transferred at selling price has an unsold on unused stock at the end of the accounting period, this involves an element of unrealised profit. This needs an adjustment which will be made by creating a stock reserve with the help of the following journal entry:

General Profit \& Loss A/c Dr.
To Stock Reserve
It may be noted that the unrealised profit is equal to the amount of difference between the selling price and the cost price of the unsold/unused stock.

舀
Example: A firm has two departments, cloth and ready-made garments. The garments were made by the firm itself out of cloth supplied by the cloth department at its selling price. From the following figures prepare Departmental Trading and Profit \& Loss Account for the year 1997.
\begin{tabular}{|l|r|c|}
\hline & \begin{tabular}{c} 
Cloth \\
Department \\
(₹)
\end{tabular} & \begin{tabular}{c} 
Ready-made \\
Garments \\
(₹)
\end{tabular} \\
\hline Opening Stock on 1.1.1997 & \(6,00,000\) & \(1,00,000\) \\
\hline Purchases & \(40,00,000\) & 30,000 \\
\hline Sales & \(44,00,000\) & \(9,00,000\) \\
\hline Transfer to Ready-made Garments Department & \(6,00,000\) & - \\
\hline Expenses - Manufacturing & - & \(1,20,000\) \\
\hline \multicolumn{1}{|c|}{ - Selling } & 40,000 & 12,000 \\
\hline Stock on 31.12.1997 & \(4,00,000\) & \(1,20,000\) \\
\hline
\end{tabular}

The stock in the ready-made garments department may be considered as consisting of \(75 \%\) cloth and \(25 \%\) other expenses. The cloth department earns profit at the rate of \(15 \%\) in 1996. General expenses of business as a whole came to ₹ \(2,20,000\).

\section*{Departmental Trading and Profit and Loss A/c for the year ending Dec 31, 1997}


Note: Stock Reserve has been calculated as follows:
Rate of Gross Profit on Sales in Cloth Debt.
\[
\frac{8,00,000}{50,00,000} \times 100=16 \%
\]

Element of cloth in closing stock of Garments
\[
75 \% \text { of } ₹ 1,20,000=₹ 90,000
\]

Unrealised Profit \(=\frac{16}{100} \times 90,000=₹ 14,400\)
Unrealised Profit in opening stock of Garments
\[
\frac{15}{100} \times \frac{75}{100} \times 1,00,000=₹ 11,250
\]
\(=\equiv\)
Example: The following figures relate to the business of Singla Associates for the year ended 31st December, 2007:
\begin{tabular}{|l|r|r|}
\hline & \multicolumn{2}{|c|}{ Department } \\
\hline & \(\mathbf{X}\) (₹) & Y (₹) \\
Stock (lst Jan, 2007) & 80,000 & - \\
Purchases from outside & \(4,00,000\) & 40,000
\end{tabular}
\begin{tabular}{l|l|r|r|} 
Notes & Wages & 20,000 & 2,000 \\
Transfer of Goods from Dept. X & -- & \(1,00,000\) \\
Stock at Cost (31 \({ }^{\text {st }}\) December, 2007) & 60,000 & 20,000 \\
Sales & \(4,00,000\) & \(1,42,000\) \\
\hline
\end{tabular}

Y's entire stock represents goods from Department X which transfers them at \(25 \%\) above the cost, Administrative and Selling Expenses mount to ₹ 30,000 which are to be allocated between Departments \(X\) and \(Y\) in the ratio of \(4: 1\) respectively.
Prepare Departmental ‘Trading and Profit and Loss Account' and a Combined Income Account of the business for the year ended 31st December, 2007.

\section*{Solution:}

Departmental Trading and Profit and Loss \(\mathrm{A} / \mathrm{c}\) for the year ending Dec 31 \({ }^{\text {st }} 2007\)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Particulars & X (₹) & Y (र) & Particulars & X (₹) & Y (₹) \\
\hline TO Opening Stock & 80,000 & ----- & By Transfer of & & \\
\hline To Purchases & 4,00,000 & 40,000 & Goods to Y & 1,00,000 & ----- \\
\hline To Wages & 20,000 & 2,000 & By Sales & 4,00,000 & 1,42,000 \\
\hline TO Goods from X & ------ & 1,00,000 & By Closing Stock & 60,000 & 20,000 \\
\hline To Gross Profit c/d & 60,000 & 20,000 & & & \\
\hline \multirow{4}{*}{\begin{tabular}{l}
To Adm. \& Selling \\
Expenses \\
* To Net Profit
\end{tabular}} & 5,60,000 & 1,62,000 & \multirow{4}{*}{By Gross profit b/d} & 5,60,000 & 1,62,000 \\
\hline & 24,000 & 6,000 & & 60,000 & 20,000 \\
\hline & 36,000 & 14,000 & & & \\
\hline & 60,000 & 20,000 & & 60,000 & 20,000 \\
\hline
\end{tabular}

Profit and Loss A/c
for the year ending Dec 31, 2007
Dr.
Cr .
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Stack Reserve & 4,000 & By Net Profit as per & \\
To Net Profit & 46,000 & Dept. Trading and profit and & \\
(to Capital A/c) & & loss A/c & \\
& & X Dept. & 36,000 \\
& & Y Dept. & 14,000 \\
\hline & \(\mathbf{5 0 , 0 0 0}\) & & \(\mathbf{5 0 , 0 0 0}\) \\
\hline
\end{tabular}

Notes The stock Reserve relates to the unrealised profit on unsold stock of ₹ 20,000 with Department Y out of the goods supplied by X. The amount has been calculated as under: ₹ \(20000 \times \frac{25}{125}=₹ 4000\)

Department A transferred 4,000 units of material X at₹ 10 per unit to Department B, The actual cost of materials of Department A is ₹ 8 per unit: Find out the Stock Reserve on 1,000 units of material \(X\) which could not be consumed by Department \(B\) during the year.

\section*{Self Assessment}

Fill in the blanks:
13. When goods or services are supplied from one department to another at cost price, the corresponding entries to record the transfer will be made at \(\qquad\)
14. If the department to whom goods or services are transferred at selling price has an unsold on unused stock at the end of the accounting period, this involves an element of \(\qquad\)
15. The unrealised profit is equal to the amount of difference between the selling price and the cost price of the \(\qquad\)

\subsection*{10.5 Summary}
- There may be a number of departments in a business organisation dealing in a different type of goods.
- To ascertain the profitability of each department it will be advisable to prepare separately Trading and Profit \& Loss Account of each Department at the end of the accounting year.
- The preparation of Departmental Trading and Profit \& Loss Account requires maintenance of proper subsidiary books having appropriate columns for different departments.
- In order to compute the profit or loss made by each department, it is necessary that each department is charged with a proper share of the various business expenses.
- Expenses incurred specially for a particular department are charged directly to the concerned department.
- Common expenses, which are charged as a whole should be distributed among the departments on some equitable basis.
- Expenses which are not easy to measure separately should be categorised on the basis of sales.
- Dependent departments are those departments where the output of one department becomes the input for another department.
- Independent departments are the departments which work independently of each other and have negligible inter department transfer.
- When goods or services are supplied from one department to another at cost price, the corresponding entries to record the transfer will be made at cost price.
- When goods or services are supplied to another department at invoice (selling) price, the transfer has to be recorded at a selling price called transfer price.

\section*{Notes \(\quad \underline{\text { 10.6 Keywords }}\)}

Allocation: Apportionment of expenses between the different departments on some rational basis.

Interdepartmental Transfers: Transfer of business and services by one department to another department.

Transfer Price: The price at which interdepartmental transfer is recorded which may be the cost or cost plus the margin of profit is known as transfer price.

\subsection*{10.7 Review Questions}
1. What do you mean by departmental accounts? Why are they considered necessary?
2. Discuss the basis for allocation of common expenses among different departments.
3. Prepare the proforma of departmental subsidiary books.
4. Illustrate the accounting treatment of interdepartmental transfer of goods.
5. What is unrealised profit? How it is worked out and accounted for?
6. Alpha Ltd., has a factory with two manufacturing departments ' \(X\) ' and ' \(Y\) '. Part of the output of department X is transferred to department Y for further processing and the balance is directly transferred to selling department. The entire production of department Y is directly transferred to the selling department. Interdepartmental stock transfers are made as follows:
X department to \(Y\) department at 33-1/3\% over departmental cost.
\(X\) department to selling department at \(50 \%\) over departmental cost.
Y department to selling department at \(25 \%\) over departmental cost.
The following information is given for the year ending 31 \({ }^{\text {st }}\) March 2011.
\begin{tabular}{|l|r|r|r|c|r|r|}
\hline & \multicolumn{2}{|c|}{ Department X } & \multicolumn{2}{c|}{ Department Y } & \multicolumn{2}{c|}{\begin{tabular}{c} 
Selling \\
Department
\end{tabular}} \\
\hline & \multicolumn{2}{|c|}{ Units } & \multicolumn{1}{c|}{\(₹\)} & \multicolumn{1}{c|}{ Units } & ₹ & Units \\
\hline & & \(₹\) \\
\hline Opening stock & 60 & 60,000 & 20 & 40,000 & 50 & \(1,28,000\) \\
Finished Goods & - & - & - & - & - & - \\
Raw materials & - & \(1,82,000\) & - & 20,000 & - & - \\
Raw materials consumed & - & 70,000 & - & 32,000 & - & - \\
Labour charges & - & - & - & - & 120 & \(4,80,000\) \\
Sales & 40 & & - & 50 & - & 60
\end{tabular}

Out of the total transfer by X department 30 units were transferred to selling department, while the remaining to department \(Y\). Per unit material and labour consumption of \(X\) department on production to be transferred directly to the selling department is 300 per cent of the labour and material consumption on units transferred to Y department. General Administration expenses are ₹ \(1,80,000\).

Prepare Departmental Profit and Loss Account and General Profit and Loss Account.
7. Illustrate the transfer of goods at invoice with a suitable example.
Answers: Self Assessment
1. Departmental accounts
3. Departments
5. Sales
7. Floor area covered
9. Input
11. Independent
13. Cost price
2. Subsidiary books
4. Equitable
15. Unsold/unused stock
Notes

\subsection*{10.8 Further Readings}
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www.futureaccountant.com

\section*{Unit 11: Branch Accounting}

\author{
CONTENTS \\ Objectives \\ Introduction \\ 11.1 Types of Branches \\ 11.2 Preparation of Books of Accounts \\ 11.3 Debtor System \\ 11.4 Stock and Debtors System \\ 11.5 Final Accounts System \\ 11.6 Wholesale Branch System \\ 11.7 Summary \\ 11.8 Keywords \\ 11.9 Review Questions \\ 11.10 Further Readings
}

\section*{Objectives}

After studying this unit, you will be able to:
- Describe the importance of branch accounts
- Know the types of branches
- Prepare the books of accounts

\section*{Introduction}

A branch means any subordinate subdivision of a business. As per the sec 29 of Companies Act, 1956, a branch is any establishment carrying on either the same or substantially the same activity as that carried on by the head office of the company. For example Bata has its branches all over the country. Each branch is treated as a separate profit centre and hence the profit or loss of each branch is computed separately. The head office of the firm has to keep strict control over various activities of each branch and ensure its smooth functioning.

\subsection*{11.1 Types of Branches}

The branches can be divided into the following categories:
- Dependent Branches
- Independent Branches
- Foreign Branches
1. Dependent Branches: Dependent branches are those branches which are not keeping the full system of accounting. The following are the key features of branch accounting:
- The dependent branches are not allowed to make any purchases and they sell goods received form the head office.
- Goods are supplied by the head office to such branches either at cost price or at invoice price.
- All the major expenses are paid by the head office.
- Normally the goods are sold for both the cash and credit.
2. Independent Branches: Independent branches are those branches which are keeping the full system of accounting. They are allowed to purchase goods from the open market and also supply to the head office, if necessary. They can pay their expenses from the cash realised and can have the bank account on their own name.
3. Foreign Branches: When a branch is located out of the home country, it is called foreign branch. Foreign branches keep their accounts in the foreign currency.

In this unit we will discuss about the accounting treatment of dependent branches.

\section*{Self Assessment}

Fill in the blanks:
1. As per the \(\qquad\) of Companies Act, 1956, a branch is any establishment carrying on either the same or substantially the same activity as that carried on by the head office of the company.
2. Each branch is treated as a separate \(\qquad\) and hence the profit or loss of each branch is computed separately.
3. ................. branches are those branches which are not keeping the full system of accounting.
4. ................. branches are those branches which are keeping the full system of accounting.
5. Foreign branches keep their accounts in the \(\qquad\)

\subsection*{11.2 Preparation of Books of Accounts}

As we discussed earlier dependent branches do not keep a complete set of books. The head office is responsible to keep the books of accounts for dependent branches. The following are the key methods which are adopted by head office to keep the branch accounts:
1. Debtors System: This system of accounting is used for those branches which are small in size. Under this system, the head office simply opens a Branch Account for each branch in which it records all transactions relating to the branch.
2. Stock and Debtor System: Under this system, the head office does not open any Branch Account. Under this system, the following ledger accounts are opened:
- Branch Stock Account
- Branch Debtors Account
- Branch Expenses Account
- Branch Adjustment Account
- Branch Profit and Loss Account

> Purpose of Preparing Branch Accounts
- To find out the profit or loss of each branch.
- To know the financial position of each branch.
- To make estimation of cash and stock for each branch.
- To know the performance of each branch.
- To make business expansion strategies.
- To fulfill the statutory requirements.
3. Final Accounts System: Under this system, the head office prepares Trading and Profit and Loss Account 'in order to find out profit or loss of each branch and a Branch Account to find out the amount due to, or due from, that branch, In this case, the Branch. Account simply acts as a personal account.
4. Whole Sale Branch System: Manufacturers may sell goods to the consumers either through the wholesalers and approved stock brokers or through their branches. In order to know whether self-retailing through branch is more profitable than wholesaling, it is necessary to make distinction between profit due to wholesale and profit due to retail business of the branch. Wholesale price is always less than retail price.

\section*{Self Assessment}

State whether the following statements are true or false:
6. The head office is not responsible to keep the books of accounts for dependent branches.
7. Stock and debtor system of accounting is used for those branches which are small in size.
8. Under debtor system, the head office simply opens a Branch Account for each branch in which it records all transactions relating to the branch.

\subsection*{11.3 Debtor System}

As stated earlier under this system the head office simply opens a branch account which records all the transactions relating to a particular branch. Branches are also not required to ascertain profit or loss as no information relating to the cost of sales is given to them. Under debtor system the goods may be invoiced to branch at cost or invoice price.
1. In Case of Goods are sent at cost price

In case of goods are sent at cost the following journal entries are passed in the books of head office:
(a) When Goods are sent to Branch
\begin{tabular}{c|c|c|c|c}
\hline S. No & Particulars & L.F. & ₹ & ₹ \\
\hline & \begin{tabular}{c} 
Branch A/c \\
To Goods Sent to Branch A/c \\
(Goods sent to branch)
\end{tabular} & & & \\
\hline
\end{tabular}
(b) Cash sent to Branch

Notes
\begin{tabular}{c|c|c|c|c}
\hline S. No & Particulars & L.F. & ₹ & ₹ \\
\hline & Branch A/c & Dr. & & \\
& To Cash A/c & & & \\
& (Cash sent to branch) & & & \\
\hline
\end{tabular}
(c) When goods are returned to head office by branch
\begin{tabular}{c|c|c|c|c}
\hline S. No & Particulars & L.F. & \(₹\) & \(₹\) \\
\hline & Goods Sent to Branch A/c & Dr. & & \\
& To Branch A/c & & & \\
& (Goods returned by branch) & & & \\
\hline
\end{tabular}
(d) When amount received from branch
\begin{tabular}{|c|c|c|c|c|c|}
\hline S. No & \multicolumn{2}{|c|}{Particulars} & L.F. & ₹ & \(₹\) \\
\hline & \begin{tabular}{l}
Cash/bank A/c \\
To Branch A/c \\
(Cash received from branch)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
(e) For closing goods sent to branch \(\mathrm{A} / \mathrm{c}\)
\begin{tabular}{c|c|c|c|c}
\hline S. No & \multicolumn{1}{|c|}{ Particulars } & L.F. & \(₹\) & \(₹\) \\
\hline & Goods sent to branch A/c & & & \\
& To Purchases A/c & & & \\
\hline
\end{tabular}
(f) For transferring profit/loss to Profit and loss \(\mathrm{A} / \mathrm{c}\)
(i) In case of profit
\begin{tabular}{c|c|c|c|c}
\hline S. No & Particulars & L.F. & ₹ & ₹ \\
\hline & Branch A/c & & & \\
& To Profit and Loss A/c & & & \\
\hline
\end{tabular}
(ii) In case of loss
\begin{tabular}{c|c|c|c|c}
\hline S. No & \multicolumn{1}{c|}{ Particulars } & L.F. & \(₹\) & ₹ \\
\hline & Profit and Loss A/c & Dr. & & \\
& To Branch A/c \\
(balance stock transferred to purchase/trading A/c)
\end{tabular}

Notes
\begin{tabular}{|c|c|c|c|}
\hline  & Proforma & Branch A/c & \\
\hline Particular & \begin{tabular}{l}
Amount \\
(₹)
\end{tabular} & Particular & Amount (₹) \\
\hline \begin{tabular}{l}
To Opening Balance \\
Stock \\
Debtors \\
Petty Cash \\
Furniture \\
Prepaid expenses \\
To goods sent to branch A/c \\
To Bank A/c (for expenses) \\
To closing balances \\
O. S. expenses \\
Creditors \\
To profit transferred to profit and loss A/c
\end{tabular} & & \begin{tabular}{l}
By opening balances \\
O. S. expenses \\
Creditors \\
By bank A/c \\
Cash sales \\
Collections from debtors \\
By goods sent to branch A/c \\
(for goods returned by branch) \\
By closing balances \\
Stock \\
Debtors \\
Petty Cash \\
Furniture (less depreciation) \\
Prepaid expenses \\
By loss transferred to profit \\
and loss A/c
\end{tabular} & \\
\hline
\end{tabular}

Example: The GM Ltd. Delhi has a sales branch in Karnal. From the following figures, prepare Karnal Branch Account and also ascertain the profit or loss of the branch.

Goods sent to branch 50,000
Cash sent to branch for expense 3,500
Cash received from the branch 52,000
Stock at branch on 31st December 5,500
Petty cash in hand at branch 500

\section*{Solution:}

In the books of Head Office
Karnal Branch Account
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} \\
\hline To Goods Sent to Branch A/c & 50,000 & By Cash & 52,000 \\
To bank A/c & 3500 & By Stock at Branch A/c & 5,500 \\
To Profit transferred to P \& L A/c & 4,500 & By Cash at Branch A/c & 500 \\
& & & 58,000 \\
\cline { 2 - 2 } & 58,000 & & \multicolumn{1}{|c|}{} \\
\hline
\end{tabular}
2. In case of Goods are sent at Invoice Price

When goods are sent at invoice price (which is higher than the cost price) it is necessary to make adjustment for the amount of difference between the cost price and invoice price.

\section*{\(09^{3}\) \\ Did u know? What is loading?}

Loading is the difference between the invoice price and cost price.

The following additional journal entries are passed in the books of head office:
(a) For adjustment of loading in opening stock
\begin{tabular}{|l|l|l|l|l|}
\hline S. No. & \multicolumn{1}{|c|}{ Particulars } & L.F. & ₹ & ₹ \\
\hline & \begin{tabular}{ll} 
Adjustment for Goods Sent to Branches A/c \\
Or \\
Stock Reserve A/c \\
To Branch Account
\end{tabular} & & & \\
& Adjustment for difference between invoice \& cost price
\end{tabular}\(\quad\)\begin{tabular}{lll} 
\\
\hline
\end{tabular}
(b) For adjustment of loading in closing stock
\begin{tabular}{|c|c|c|c|c|}
\hline S.No. & Particulars & L.F. & ₹ & ₹ \\
\hline & Branch A/c & & & \\
& To Adjustment for Stock with Branch A/c & & & \\
& Or & & & \\
& To Stock Reserve A/c & & & \\
\hline
\end{tabular}

E
Example: \(\mathrm{ABC} \& \mathrm{Co}\). of Delhi have a branch at Mumbai. Goods are sent by the head office at invoice price which is at a profit of \(20 \%\) on invoice price. All expenses of the branch are paid by the head office. From the following particulars, prepare branch account in the head office books when, goods are shown at an invoice price.
Opening balances:(₹)
Stock at invoice price ..... 11,000
Debtors ..... 1,700
Petty cash ..... 100
Goods sent to branch at invoice price ..... 20,000
Expenses made by head office:
Rent ..... 600
Wages ..... 200
Salary, etc. ..... 900
Remittances made to head office:
Cash sales ..... 2,650
Cash collected from debtors ..... 21,000
Goods returned by branch at invoice price ..... 400
Balances at the end:
Stock at invoice price ..... 13,000
Debtors at the end ..... 2,000
Petty cash ..... 25

\section*{Notes}

\section*{Solution:}

As profit is \(20 \%\) on invoice price. So profit is \(20 / 100\) or \(1 / 5\) of invoice price. Adjusting entries are to be passed on the above basis

\section*{Mumbai Branch Account}
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Particulars} & ₹ & Particulars & \\
\hline \multirow[t]{14}{*}{\begin{tabular}{l}
To Balance b/d: \\
Stock \\
Debtors \\
Petty Cash \\
To Goods Sent to Branch A/c \\
To Bank A/c (Expenses): \\
Rent \\
Wages \\
Salary, etc. \\
To Adjustment for Goods Returned \\
To Stock Reserve A/c \\
To Net Profit transferred to \\
General Profit \& Loss A/c
\end{tabular}} & & \multirow[b]{5}{*}{\[
\begin{aligned}
& 12,800 \\
& 20,000
\end{aligned}
\]} & \multirow[t]{4}{*}{\begin{tabular}{l}
By Cash Sales \\
By Cash Collected from Debtors \\
By Goods Returned by Branch \\
By Adjustment for Goods sent
\end{tabular}} & 2,650 \\
\hline & \[
11,000
\] & & & 21,000 \\
\hline & 1,700 & & & 400 \\
\hline & 100 & & & \\
\hline & & & to Branch A/c & 4,000 \\
\hline & & & By Stock Reserve A/c & 2,200 \\
\hline & 600 & & By Closing Balance & \\
\hline & 200 & & Stock 13,000 & \\
\hline & 900 & 1,700 & Debtors 2,000 & \\
\hline & & 80 & Petty Cash 25 & 15,025 \\
\hline & & 2,600 & & \\
\hline & & & & \\
\hline & & 8,095 & & \\
\hline & & 45,275 & & 45,275 \\
\hline
\end{tabular}

\footnotetext{
\(\stackrel{\sim}{n}\)
The Shraddha Gas Co., Kanpur has a sales branch at Ghaziabad and invoiced goods to the branch at cost price plus 25 per cent. It is arranged that all cash received by the branch is to be paid daily to the Head Office Account with the SBI. From the following particulars, prepare Branch Account and Goods sent to Branch Account in the Head Office ledger showing the actual profit or loss of the branch for the year ending -December 31, 2004.
\begin{tabular}{lr} 
& \(₹\) \\
Stock on 1-1-2004 (at invoice price) & 12,000 \\
Goods Sent to Branch (at invoice price) & 96,000 \\
Debtors on 1-1-2004 & 1,500 \\
Cash Sent to Head Office & 77,100 \\
Sales & 77,000 \\
Rent, Rates and Taxes & 3,200 \\
Salaries and Wages & 4,800 \\
Debtors on 31-12-2004 & 1,600 \\
Goods Returned to Head Office (at invoice price) & 16,000 \\
Shortage of stock (at invoice price) & 200
\end{tabular}
}

\section*{Self Assessment}

Multiple Choice Questions:
9. Goods sent by the H.O. to the branch but not received by the branch are termed as:
(a) Branch account
(b) Goods in Transit A/c
(c) None of the above.
10. If profit on cost is \(25 \%\) then profit on sales will be
(a) \(25 \%\)
(b) \(20 \%\)
(c) \(30 \%\)
11. If profit on sales is \(25 \%\) then profit on cost will be
(a) \(25 \%\)
(b) \(20 \%\)
(c) \(33 \frac{1}{3} \%\)

\subsection*{11.4 Stock and Debtors System}

Under Stock and Debtors System, the head office does not open a Branch Account in its books. It maintains a few control accounts for recording the various branch transactions. These accounts usually are:
- Branch Stock Account
- Branch Debtors Account
- Branch Expenses Account
- Branch Cash Account
- Goods sent to Branch Account
- Branch Fixed Assets Account

At the end of the accounting year, head office prepares the Branch Adjustment Account and the Branch Profit \& loss Account. This system is used only when goods are invoiced at selling price which the branch is not allowed to vary.

The following journal entries are made by the head office:
(1) When goods are sent to branch (at Invoice price)
\begin{tabular}{c|c|c|c|c}
\hline S.No & Particulars & L.F. & ₹ & ₹ \\
\hline & Branch Stock A/c & & & \\
& To Goods Sent to Branch A/c \\
& (Goods sent to branch at an invoice price) & & & \\
\hline
\end{tabular}
(2) When goods are retuned by the branch to head office (at invoice price)
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{c} 
Goods Sent to Branch A/c \\
To Branch Stock A/c \\
(Goods returned by the branch)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}

Notes (3) Sales of goods by branch
(a) For cash sale
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Cash A/c \\
To Branch Stock A/c \\
(Cash sales at branch \()\)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
(b) For credit sale
\begin{tabular}{l|l|l|l|l}
\hline & \begin{tabular}{l} 
Branch Debtors A/c \\
To Branch Stock A/c \\
(Cash sales at branch)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
(4) Cash receipts from branch debtors
\begin{tabular}{l|lc|l|l|l}
\hline & \begin{tabular}{c} 
Cash A/c \\
To Branch debtors A/c \\
(Cash received form branch debtors)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
(5) For sales return
\begin{tabular}{l|l|l|l|l}
\hline & Branch stock A/c & Dr. & & \\
To Branch debtors A/c & & & & \\
& (Cash received form branch debtors) & & & \\
\hline
\end{tabular}
(6) For discount allowed, bad debts, etc.
\begin{tabular}{l|cc|l|l|l}
\hline & \begin{tabular}{cc} 
Branch Expenses A/c & Dr. \\
To Branch Debtors A/c \\
& \\
(Expenses on branch debtors) & \\
& \\
\hline
\end{tabular} \\
\hline
\end{tabular}
(7) For payment of branch expenses
\begin{tabular}{l|l|l|l|l}
\hline & Branch Expenses A/c & Dr. & & \\
To Cash A/c & & & & \\
& (Branch expenses paid by head office) & & & \\
\hline
\end{tabular}
(8) If there is shortage/loss of stock, then
\begin{tabular}{l|ll|l|l|l}
\hline & Branch Adjustment A/c (with amount of loading) & Dr. & & & \\
Branch profit and loss A/c (with cost of storage) & Dr. & & & \\
& To Branch Stock A/c & & & & \\
\hline & (Loss in Stock at branch) & & & & \\
\hline
\end{tabular}
(9) For surplus of stock at branch
\begin{tabular}{l|l|l|l|l}
\hline & Branch stock A/c & Dr. & & \\
To Branch adjustment A/c (with amount of loading) & & & \\
& To Branch profit and loss A/c (with cost of storage) & & & \\
\hline
\end{tabular}
(10) For adjustment of loading in opening stock
\begin{tabular}{l|lc|l|l|l}
\hline & \begin{tabular}{c} 
Stock reserve A/c \\
To Branch adjustment A/c \\
(Difference in value passed)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
(11) For adjustment of loading in closing stock
\begin{tabular}{l|l|l|l|l}
\hline & Branch Adjustment A/c & Dr. & & \\
To Stock Reserve A/c & & & & \\
& (Difference in value passed) & & & \\
\hline
\end{tabular}
(12) For adjustment of loading on net goods sent to branch
\begin{tabular}{l|l|l|l|l}
\hline & Goods sent to Branch A/c & Dr. & & \\
To Branch Adjustment A/c & & & & \\
& (Difference in value passed) & & & \\
\hline
\end{tabular}
(13) Branch expenses are transferred to branch adjustment account i.e.
\begin{tabular}{l|l|l|l|l}
\hline & Branch Adjustment A/c & Dr. & & \\
To Branch Expenses A/c & & & & \\
& (Branch expenses transferred) & & & \\
\hline
\end{tabular}
(14) Transfer of balance of branch adjustment account to general profit and loss account, then
\begin{tabular}{l|l|l|l|l}
\hline & Branch Adjustment A/c Dr. & & & \\
& To General Profit \& Loss A/c & & & \\
\hline
\end{tabular}

Note: In case of loss at branch, reverse entry to be passed.
(15) For closing of goods sent to branch \(\mathrm{A} / \mathrm{c}\)
\begin{tabular}{l|l|l|l|l}
\hline & Goods sent to Branch A/c & Dr. & & \\
To Trading A/c & & & & \\
& (closing of goods sent to branch) & & & \\
\hline
\end{tabular}

Example: ABC Co. has its branch at Jaipur. Goods are invoiced to the branch at selling price, being cost plus \(25 \%\) (on cost). From the following details prepare Branch stock \(\mathrm{A} / \mathrm{c}\), Branch Expenses A/c, Branch Debtors A/c, Branch Adjustments A/c, Reserve A/c, Goods supplied to Branch A/c, Stock Reserve A/c and also Branch A/c:

Goods supplied to branch (at cost to head office)
Cash sales
Notes Credit sales ..... 5,600
Cash received from Debtors ..... 5,000
Rent and rates (paid by head office) ..... 900
Wages (paid by head office) ..... 760
Sundry Expenses (paid by head office) ..... 100
Discount allowed to customers ..... 200
Goods returned by customers ..... 100
Goods spoiled ..... 50
Opening stock (at invoice price) ..... 3,000
Opening debtors ..... 2,000

\section*{Solution:}

In the books of the head office
(A) Branch Stock Account
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} \\
\hline To Balance b/d & 3,000 & By Cash (sales ) & 17,400 \\
To Supplies from Head office (125\% of 15,200) & 19,000 & By Branch Debtors A/c (Credit sales) & 5,600 \\
Branch Debtors (Returns by debtors) & 100 & By Branch Adjustment A/c & \\
To Net profit transferred to General & & (Spoilage of goods) & 50 \\
Profit \& Loss A/c & 950 & & \\
\cline { 2 - 2 } & \(\mathbf{2 3 , 0 5 0}\) & & \(\mathbf{2 3 , 0 5 0}\) \\
\hline
\end{tabular}
(B) Branch Expenses Account
\begin{tabular}{|c|c|c|c|}
\hline Particulars & ₹ & Particulars & ₹ \\
\hline To Cash: Rent \& Rates & 900 & By Branch Adjustment A/c (Transfer) & 1,960 \\
Wages & 760 & & \\
Sundry expenses & 100 & & \\
To Branch debtors A/c: Discount allowed & 200 & & \(\mathbf{1 , 9 6 0}\) \\
\cline { 2 - 2 } & \(\mathbf{1 , 9 6 0}\) & & \\
\hline
\end{tabular}
(C) Branch Debtors Account
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \(\boldsymbol{₹}\) & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} \\
\hline To Balance b/d & 2,000 & By Cash & 5,000 \\
To Branch Stock A/c (credit sales) & 5,600 & By Discount (Branch expenses) A/c & 200 \\
& & By Branch stock A/c (Returns) & 100 \\
& & By Balance c/d & 2,300 \\
& \(\mathbf{7 , 6 0 0}\) & & \(\mathbf{7 , 6 0 0}\) \\
\hline
\end{tabular}
(D) Branch Adjustment Account
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} \\
\hline To branch stock A/c (spoilage of goods) & 50 & By good supplied to branch A/c & 3,800 \\
To branch expenses A/c & 1,960 & By stock reserve A/c & 600 \\
To net profit transferred to general Profit \& & 2,390 & & \\
Loss A/c & & & \(\mathbf{4 , 4 0 0}\) \\
\cline { 2 - 2 } & \(\mathbf{4 , 4 0 0}\) & & \\
\hline
\end{tabular}
(E) Goods Supplied to Branch Account
\begin{tabular}{|l|r|l|c|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{c|}{ Particulars } & \(₹\) \\
\hline To Branch Adjustment A/c & 3,800 & By Branch stock A/c & 19,000 \\
To purchases A/c & 15,200 & & \\
\cline { 2 - 2 } & \(\mathbf{1 9 , 0 0 0}\) & & \(\mathbf{1 9 , 0 0 0}\) \\
\hline
\end{tabular}
(F) Stock Reserve Account
\begin{tabular}{|c|c|l|c|}
\hline Particulars & \(₹\) & \multicolumn{1}{|c|}{ Particulars } & \(₹\) \\
\hline To branch adjustment a/c & 600 & By Balance b/d & 600 \\
\hline
\end{tabular}

\section*{(G) Jaipur Branch Account}
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} \\
\hline To opening stock & 3,000 & By Cash (cash sales) & 17,400 \\
To opening debtors & 2,000 & By Received from branch debtors & 5,000 \\
To goods sent to branch & 19,000 & By Closing debtors a/c (3) & 2,300 \\
To cash : Rent \& Rates & 900 & By Adjustment for opening stock & 600 \\
\(\quad\) Wages & 760 & By Adjustment for goods sent & 3,800 \\
\(\quad\) Sundry expenses & 100 & & \\
To net profit transferred to general & & & \\
Profit \& Loss a/c (1) & \(\mathbf{3 , 3 4 0}\) & & \(\mathbf{2 9 , 1 0 0}\) \\
\hline
\end{tabular}

\section*{Working Notes:}
(1) According to branch stock and debtors system, total net profit transferred to General profit \& Loss A/c is ₹ 3,340 i.e. ₹ 950 from Branch stock A/c and ₹ 2,390 from Branch adjustment A/c.
(2) Profit is separated by using \(25 \%\) on cost or \(20 \%\) on sale basis i.e., \(1 / 5\) of selling price.
(3) For closing debtors balance, see Branch Debtors A/c.

\section*{Notes \\ Self Assessment}

State whether the following statements are true or false:
12. Branch \(\mathrm{A} / \mathrm{c}\) under independent branch is a personal \(\mathrm{A} / \mathrm{c}\).
13. Goods sent by the H.O. is not received by the branch, it is debited to goods in transit A/c.
14. If profit on cost is \(25 \%\) then it is \(20 \%\) on sales.
15. If profit on sales is \(25 \%\) then it is \(20 \%\) on costs.

\subsection*{11.5 Final Accounts System}

The profit or loss of a dependent branch can also be worked out by preparing a Memorandum Branch Trading and Profit \& Loss Account. This account is prepared on the basis of cost of goods sent to the branch (not the invoice price). Apart from the Branch Trading and Profit \& Loss Account, the head office also maintains the Branch Account. But, under this system, the Branch Account is in the nature of a personal account which shows only the mutual transactions between the head office and the branch, the balance of Branch Account, therefore, represents the net assets of the branch.
\(=E\)
Example: A-one Ltd., Bhopal has a branch at Madras to which the goods are sent at cost plus \(25 \%\). The Madras branch keeps its own Sales Ledger and remits all cash received to the head office every day. All expenses are paid by the head office. The transactions for Madras Branch during the year ending December 31, 2008 were as follows:
\begin{tabular}{|l|r|l|r|}
\hline & \multicolumn{1}{|c|}{\(₹\)} & & \multicolumn{1}{|c|}{\(₹\)} \\
\hline Stock (1-1-2008) & 11,000 & Return inwards & 500 \\
Debtors (1-1-2008) & 100 & Cheques sent to branch: & \\
Petty cash & 100 & Rent & 600 \\
Cash sale & 2,650 & Wages & 200 \\
Credit sales & 23,950 & Salary and other expenses & 900 \\
Goods sent to branch & 20,000 & Stock (31-12-2008) & 13,000 \\
Collection on ledger account & 21,000 & Debtors (31-12-2008) & 2,000 \\
Goods returned to H. O. & 300 & Petty cash (31-12-2008) & \\
Bad debts & 300 & (including misc. income ₹ 25 not & \\
Allowance to customers & 250 & remitted) & 125 \\
\hline
\end{tabular}

Prepare the Memorandum Branch Trading and Profit and Loss A/c and Madras branch A/c for the year ending Dec 31, 2008.

\section*{Memorandum Branch Trading and Profit and Loss A/c for the year ending 31-12-2008}

Dr.
Cr.
\begin{tabular}{|c|c|c|c|c|}
\hline Particulars & ₹ & \multicolumn{2}{|l|}{Particulars} & ₹ \\
\hline To O.S. & & By sales & & \\
\hline (₹ 11,000-₹ 2,200 ) & 8,800 & Cash & 2,650 & \\
\hline To goods sent to branch & & Credit & 23,950 & \\
\hline (20,000-4,000) & 16,000 & & 26,600 & \\
\hline To wages & 200 & Less: Returns & 500 & 26,100 \\
\hline To gross profit c/d & 11,740 & By goods sent to HO
\[
\text { (₹ } 300 \text { - ₹ } 60 \text { ) }
\] & & \[
240
\] \\
\hline & & By closing stock
(₹ 13,000-₹ 2,600) & & 10,400 \\
\hline & 36,740 & & & 36,740 \\
\hline To bad debts & 300 & By gross profit b/d & & 11,740 \\
\hline To allowance & 250 & By Misc. income & & 25 \\
\hline To rent & 600 & & & \\
\hline To salaries and other expenses & 900 & & & \\
\hline To profit transferred to general profit and loss \(\mathrm{A} / \mathrm{c}\) & 9,715 & & & \\
\hline & 11,765 & & & 11,765 \\
\hline
\end{tabular}

Madras Branch A/c
\begin{tabular}{|l|r|l|r|}
\hline & \(₹\) & & \(₹\) \\
\hline To balance b/d & & By bank A/c & \\
Stock & 8,800 & Cash received form debtors & 21,000 \\
Debtors & 100 & Cash sales & 2,650 \\
Petty cash & 100 & By goods sent to branch & \\
To goods sent to branch A/c & 16,000 & (returns to HO) & 240 \\
To bank A/c & 600 & By balance c/d & Stock \\
Rent & 200 & Debtors & 10,400 \\
Wages & 900 & Petty cash & 2,000 \\
Salaries and other exp. & 9,715 & & 125 \\
To profit as per Branch Trading \\
and Profit and Loss A/c & \(\mathbf{3 6 , 4 1 5}\) & & \\
\cline { 2 - 2 } & & \(\mathbf{3 6 , 4 1 5}\) \\
\hline
\end{tabular}

\section*{Notes 11.6 Wholesale Branch System}

Sometimes the manufacturing organisations (head office) sell their products through wholesalers as well as through own branches. In case the head office decides two prices (i) Wholesale price; and (ii) retail price. Goods are supplied to the whole-seller and branches at wholesale price, that is, cost plus profit. The branches are supposed to sell these goods at retail price which is greater than the wholesale price. It means the branches earn more profit than the head office. But the total profit (Retail price-cost) cannot be considered as branch profit. The real profit of the branch shall be the difference between the wholesale price and retail price.

The wholesale price means cost plus profit. Therefore in the books of head office Branch Stock Account shall be maintained at wholesale price. At the end of the accounting period, the problem arises only when the goods received from head office remains unsold at branch, because it includes a part of profit which has been charged by the head office. To calculate the proportion of profit, the value of unsold goods shall be reduced from wholesale price to cost price.

At the end of accounting year the following entry shall be made:
Profit \& Loss A/c (H.O.) Dr

To Stock Reserve A/c
(Reserve created for the difference in the wholesale price and cost price of Branch closing stock)

Example: M/s Gaba and co. of Delhi submits the following particulars regarding the branch transactions of its Mumbai branch for the year ended March 31, 2006:
\begin{tabular}{lrr} 
& H.O & Branch \\
Stock on 1-4-2005 & (₹) & (₹) \\
Goods purchased during the year & 72,000 & 28,800 \\
Indirect expenses & \(4,18,000\) & ---- \\
Goods sent to branch at invoice price & 21,800 & 3,900 \\
Sales & \(1,29,600\) & ----- \\
Goods received by branch & \(3,78,000\) & \(1,45,800\) \\
Goods sold to regional stockists & ------ & \(1,29,600\) \\
\hline
\end{tabular}

Generally goods are invoiced to branch and regional stockists at \(20 \%\) below the list price. The list price is calculated at \(80 \%\) above the cost. Goods are sold to the customers at the list price by the HO and the branch both.

You are required to prepare the Trading and Profit and Loss A/c of the head office and the branch for the year ended on March 31, 2006.

\section*{Solution:}

In the books of Head Office

> Trading and Profit and Loss A/c for the year ended on March 31, 2006
Dr
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{c|}{Cr} \\
\hline \multirow{4}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} \\
\hline To O.S. & 72,000 & By sales & \(3,78,000\) \\
To Purchases & \(4,18,000\) & By goods sent to the branch & \(1,29,600\) \\
To GP c/d & \(2,31,800\) & By regional stockists & 79,200 \\
& & By closing stock & \(1,35,000\) \\
\cline { 2 - 2 } & \(\mathbf{7 , 2 1 , 8 0 0}\) & & \(7,21,800\) \\
\cline { 2 - 2 } & 21,800 & By gross profit b/d & \(2,31,800\) \\
To stock reserves & & By stock reserve (OS) & 8,800 \\
₹ 41760 * 44/144) & 12,760 & (₹ 28800 * 44/144) & \\
To Net Profit & \(2,06,040\) & & \(\mathbf{2 , 4 0 , 6 0 0}\) \\
\hline
\end{tabular}

Branch Trading and Profit and Loss A/c
for the year ended on March 31, 2006
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Dr \({ }^{\text {c }}\)} \\
\hline Particulars & ₹ & Particulars & ₹ \\
\hline To OS & 28,800 & By sales & 1,45,800 \\
\hline To goods from head office & 1,29,600 & By closing stock & 41,760 \\
\hline To GP c/d & 29,160 & & \\
\hline & 1,87,560 & & 1,87,560 \\
\hline To indirect exp. & 3,900 & By GP b/d & 29,160 \\
\hline To general profit and loss a/c & 25,260 & & \\
\hline & 29,160 & & 29,160 \\
\hline
\end{tabular}

\section*{Working notes:}
1. Calculation of list price and invoice price

Let cost price is \(=₹ 100\)
List price \(=₹ 100+80 \%\) of \(₹ 100=₹ 180\)
Thus invoice price = ₹ \(180-₹ 20 \%\) of \(180=₹ 144\)
2. Calculation of closing stock at the branch
\begin{tabular}{lr} 
₹ \\
OS at the branch & 28,800 \\
Goods sent by the HO & \(\underline{1,29,600}\) \\
\hline \(1,58,400\) \\
less: cost of goods sold to customers & \\
\((1,45,800\) * 144/180 \()\) & \(\underline{1,16,640}\) \\
Closing stock at the branch & \(\underline{41,760}\)
\end{tabular}


\section*{Self Assessment}

Fill in the blanks:
16. The Branch Account is in the nature of a \(\qquad\) account which shows only the mutual transactions between the head office and the branch.
17. Goods are supplied to the whole-seller and branches at wholesale price, that is, \(\qquad\)

\subsection*{11.7 Summary}
- The extent of business expansion is responsible for opening of the new branches.
- The branches are of three types: Dependent Branches, Independent Branches and Foreign Branches.
- Dependent branches are such which are not free either to buy or sell without the head office directives.
- Independent branches are such which are free to buy and sell the goods, i.e., Branches which buy goods according to its requirements and sell goods for cash as well as on credit.
- In case of dependent branches, complete set of books is not required because dependent branches are required to remit cash daily to the head office or deposit it in a bank account as per instructions of the head office.
- Stock at branch and cash at branch are to be shown in the balance sheet of the head office as an asset \& the goods sent to branch is shown in the trading account.
- Complete set of accounts connected with the branch are kept in the head office whereas office branch maintains the cash records only which is sent to the head office by the branch.
- When goods are sent by the head office to branch/es at an invoice price which is more than the cost price, then the object of the head office is to exercise (1) more control on stock by preparing branch stock register, and (2) to keep the amount of profit as secret.
- When goods are sent by head office to branch at an invoice price, then stock and debtor system can be used to ascertain profit or loss of the branch.

\subsection*{11.8 Keywords}

Dependent Branches: Dependent branches are such which are not free either to buy or sell without the head office directives.

Debtors System: This system of accounting is used for those branches which are small in size. Under this system, the head office simply opens a Branch Account for each branch in which it records all transactions relating to the branch.

Independent Branches: Independent branches are such which are free to buy and sell the goods, i.e., Branches which buy goods according to its requirements and sell goods for cash as well as on credit.

Loading: Loading is the difference between the invoice price and cost price.
Stock and Debtor System: Under this system, the head office does not open any Branch Account.

\subsection*{11.9 Review Questions}
1. How many types of branches are there? What entries are made in the books of company to incorporate branch's trial balance?
2. Explain the causes of difference in the balances shown by the H.O. and the Branch.
3. How are normal and abnormal losses are treated in the branch account?
4. What are the different systems of accounting of dependent branches?
5. How to compute the profit of dependent branches?
6. Illustrate the branch stock account with a suitable example.
7. Delhi Traders, Delhi opened a branch at Baroda on 1st January 2006. The following information is available in respect of the branch for the year 2006.
\begin{tabular}{lr} 
Goods sent to the branch & 70,000 \\
Cash sales at the branch & 40,000 \\
Credit sales at the branch & 60,000 \\
Salaries of the branch paid by the Head Office & 25,000 \\
Office Expenses of the branch paid by the Head Office & 10,000 \\
Cash remittances to branch towards petty cash & 6,000 \\
Petty cash at branch on 31.12 .2006 & 500 \\
Debtors at branch as on 31.12.2006 & 5,000 \\
Stock at branch on 31.12.2006 & 27,000
\end{tabular}

Prepare Branch Account to show the profit/loss from the branch for the year 2006.
8. A Head Office at Mumbai has branch at Chennai in charge of a manager. The ratio of gross profit on turnover at the branch was \(25 \%\) constant throughout the year.
The Branch manager is entitled to a commission of \(10 \%\) of the profit earned by the branch calculated before charging his commission, but subject to a deduction from such commission a sum equal to \(50 \%\) of any ascertained deficiency of Branch Stock. All goods were supplied to the branch by the Head Office.

\section*{Notes}

From the following figures extracted from the branch books, calculate the commission due to the manager for the year ended 31st December, 2006
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} & \multicolumn{1}{c|}{ Particulars } & \multicolumn{1}{c|}{\(₹\)} \\
\hline Stock as on 1.1.06 at Cost & 31,210 & Establishment Expenses & 22,550 \\
Goods received from Head Office at Cost & \(1,08,700\) & Drawings by Manager against Commission & 1,000 \\
Sales & \(1,46,400\) & Stock on 31.12.06 at Selling Price & 39,880 \\
\hline
\end{tabular}
9. From the following details prepare Branch Account in the books of Head Office:
Goods sent to branch at cost 40,000
\(\begin{array}{ll}\text { Goods returned by branch at cost } & 2,000\end{array}\)
Branch credit sales 51,000
Cash sales at branch 3,500
Cash remitted to head office by branch 40,000
\(\begin{array}{ll}\text { Expenses paid by head office } & 10,000\end{array}\)
Discount allowed to customers by branch 1,800
Closing Stock with Branch at Cost 14,000
\(\begin{array}{ll}\text { Branch Debtors (Closing balance) } & 7,700\end{array}\)
10. Kapur Brothers has branch at Lucknow, Goods are invoiced to his branch at \(20 \%\) profit on invoice price. From the following details, prepare 'Branch Account' in the books of Head Office showing branch profit:
\begin{tabular}{lr} 
Credit sales & \(1,12,000\) \\
Goods supplied to branch at invoice price & \(3,80,000\) \\
Cash sales & \(2,48,000\) \\
Cash received from debtors & \(1,00,000\) \\
Wages (Paid by head office) & 15,200 \\
Rent (Paid by head office) & 18,000 \\
Discount allowed to customers & 4,000 \\
Sundry expenses (Paid by head office) & 1,000 \\
Goods returned by customers & 2,000 \\
Depreciation on furniture & 1,000 \\
Goods spoiled & 1,000
\end{tabular}
11. X Ltd. operates a retail branch at Mumbai. All purchases are made by the head office in Calcutta, goods being charged out to the Branch at selling price which is cost plus \(25 \%\). All the expenses of branch are paid through head office cheques. Cash collected from customers as also the ready money sales are daily banked to the credit of the head office. From the following particulars of the branch write up the necessary accounts to arrive at the branch profit or loss in the head office books by using stock and debtors system.
\begin{tabular}{|l|r|l|r|}
\hline \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} & \multicolumn{1}{|c|}{ Particulars } & \multicolumn{1}{|c|}{\(₹\)} \\
\hline Debtors at start & 15,000 & Invoiced Inventory at beginning & 30,000 \\
Debtors at end & 19,000 & Invoiced Inventory at end & 28,000 \\
Ready money sales during the year & \(1,30,000\) & Salaries & 12,000 \\
Cash Received on Ledger Account & \(1,20,000\) & Rent etc. & 10,000 \\
Return to H.O. at Invoiced Amount & 5,000 & Bad debts & 4,000 \\
Normal Leakage and Spoilage & 4,000 & Discount and Allowances & 6,000 \\
\hline
\end{tabular}

\section*{Answers: Self Assessment}
1. \(\sec 29\)
3. Dependent
5. foreign currency
2. profit centre
7. False
9. (b)
4. Independent
6. False
8. True
11. (c)
13. True
15. False
10. (b)
12. True
14. True
15. False
16. personal
17. cost plus profit

\subsection*{11.10 Further Readings}

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Prasanna Chandra, Financial Management - Theory and Practice, Tata McGraw Hill, New Delhi (1994).
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\section*{Unit 12: Hire Purchase}
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Objectives
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12.1 Meaning and Nature of Hire Purchase
12.1.1 Features of Hire Purchase Agreement
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\section*{Objectives}

After studying this unit, you will be able to:
- Explain the meaning and nature of hire purchase
- Summarize the recording of transactions
- Create the different accounts

\section*{Introduction}

Mr. Rohit wants to buy a car but he is not able to pay the full amount in one time. He went into a contract with the dealer that he will pay ₹ 50000 as down payment and the rest of amount in equal installments. The dealer agreed with the contract but he said that he will transfer the ownership of the car only after receiving the last installment. These types of purchase agreements are called hire purchase agreements.

In the present unit, you will study about the meaning and nature of hire purchase. The unit covers the aspects like recording transactions and maintaining accounts. In the modern age of science and technology several methods are used to sell goods, products or services. There are two systems of deferred payments, namely, (i) Hire Purchase System, and (ii) Instalment Payment System. In this unit we will learn in detail about the Hire Purchase System.

\subsection*{12.1 Meaning and Nature of Hire Purchase}

A hire purchase agreement is defined in the Hire Purchase Act, 1972 as a peculiar kind of transaction in which the goods are let on hire with an option to the hirer to purchase them, with the following stipulations:
1. Payments to be made in installments over a specified period.
2. The possession is delivered to the hirer at the time of entering into the contract.
3. The property in goods passes to the hirer on payment of the last installment.
4. Each installment is treated as hire charges so that if default is made in payment of any installment, the seller becomes entitled to take away the goods.
5. The hirer/purchase is free to return the goods without being required to pay any further installments falling due after the return.

\subsection*{12.1.1 Features of Hire Purchase Agreement}

The following are the key features of hire purchase agreement:
- Under hire purchase system, the buyer takes possession of goods immediately and agrees to pay the total hire purchase price in installments.
- Each installment is treated as hire charges.
- The ownership of the goods passes from the seller to the buyer on the payment of the last installment.
- In case the buyer makes any default in the payment of any installment the seller has the right to repossess the goods from the buyer and forfeit the amount already received treating it as hire charges.
- The hirer has the right to terminate the agreement any time before the property passes. That is, he has the option to return the goods in case he need not pay installments falling due thereafter. However, he cannot recover the sums already paid as such sums legally represent hire charges on the goods in question.

\subsection*{12.1.2 Hire Purchase vs Installment Sale}

Though both the system of consumer credit are very popular in financing and look similar, there is clear distinction between the two. In an installment sale, the contract of sale is entered into the goods are delivered and the ownership is transferred to the buyer but the price is paid in specified installments over a period of time. In hire purchase, the hirer can purchase the goods at any time during the term of the agreement and he has the option to return the goods at any time without having to pay the rest of the installments. But in installment payment financing there is no such option to the buyer.


In installment payment, the owner ship of the goods is transferred immediately at the time of entering into the contract. Whereas in hire purchase the ownership is transferred after the payment of last installment or when the hirer exercises his option to buy goods.

\section*{Notes \\ Self Assessment}

State whether the following statements are true or false:
1. Under hire purchase system, the buyer takes possession of goods immediately and agrees to pay the total hire purchase price in installments.
2. Under hire purchase the interest is calculated on the purchase price.
3. Each installment is treated as hire charges.
4. In case of default, the hire vendor is allowed to repossess the goods immediately.
5. In installment payment, the owner ship of the goods is transferred immediately at the time of entering into the contract.
6. In an installment sale, the contract of sale is entered into the goods are delivered and the ownership is transferred to the buyer but the price is paid in specified installments over a period of time.
7. The hirer has no right to terminate the agreement before the property passes.
8. A hire purchase agreement is defined in the Hire Purchase Act, 1872.

\subsection*{12.2 Accounting Treatment of Hire Purchase Transactions}

In case of a hire purchase transaction the accounts are prepared by both the hire purchaser and vendor. The accounting treatment of hire purchase transactions in the books of hire purchaser and vendor are discussed below:

\subsection*{12.2.1 Accounting Treatment in the Books of Hire Purchaser}

There are two methods by which the purchaser can record the transactions in the books of accounts.
1. When assets are recorded at full cash price
2. When assets are recorded at actual cash price paid

\section*{When assets are recorded at full cash price}

The following entries are passed in the books of hire purchaser:
1. When Asset is purchased on Hire Purchase
\begin{tabular}{|l|ll|l|l|l|}
\hline S. No. & \multicolumn{1}{|c|}{ Particulars } & L.F. & Dr. & Cr. \\
\hline & Assets A/c \\
& To Hire Vendor A/c & & & \\
& (Asset purchased under hire purchase system)
\end{tabular}\(\quad\)\begin{tabular}{llll} 
\\
\hline
\end{tabular}
2. For cash down payment
\begin{tabular}{|l|l|l|l|}
\hline Hire Vendor A/c & Dr. & & \\
To Cash A/c & & & \\
(Cash down payment) & & & \\
\hline
\end{tabular}
3. For interest accrued
\begin{tabular}{|ll|l|l|l|}
\hline Interest A/c & Dr. & & & \\
To Hire Vendor A/c & & & & \\
(Interest account debited) & & & & \\
\hline
\end{tabular}
4. When the first installment is paid
\begin{tabular}{|l|l|l|l|}
\hline \begin{tabular}{l} 
Hire Vendor A/c \\
To Bank A/c \\
(payment of 1st instalment)
\end{tabular} & & & \\
\hline
\end{tabular}
5. For Depreciation charges
\begin{tabular}{|ll|l|l|l|}
\hline Depreciation A/c & Dr. & & & \\
To Asset A/c & & & & \\
(Depreciation charged on asset) & & & & \\
\hline
\end{tabular}
6. For transfer of interest and depreciation to profit and loss A/c
\begin{tabular}{|lc|c|c|c|}
\hline Profit and Loss A/c & Dr. & & & \\
To Interest A/c & & & & \\
To Depreciation A/c & & & \\
(Interest and depreciation are transferred to profit and loss A/c) & & & \\
\hline
\end{tabular}

Note: Entries 3 and 4 will be repeated for all subsequent installments.

Example: Ram Ltd. bought on 1.1.04 a machine from Shyam Ltd. Under a hire purchase system of payment under which three annual installments of ₹ 2,412 would be paid. There is no down payment and the cash price is ₹ 6,000 , the rate of interest would be \(10 \%\) and depreciation @ \(10 \%\) p.a. would be charged on straight line basis.
Prepare machinery \(\mathrm{A} / \mathrm{c}\) and vendor \(\mathrm{A} / \mathrm{c}\) in the books of Ram ltd.

\section*{Solution:}

In the books of Ram Ltd.
Shyam Ltd Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & Amount
(₹) & Date & Particulars & Amount (₹) \\
\hline \multirow{4}{*}{\[
\begin{aligned}
& 31.12 .04 \\
& " ״
\end{aligned}
\]} & \multirow{4}{*}{To Cash A/c To Balance c/d} & & \multirow{3}{*}{31.12.04} & By Machine A/c & 6,000 \\
\hline & & 2,412 & & \multirow[t]{2}{*}{By Interest A/c} & \multirow[t]{2}{*}{600} \\
\hline & & 4,188 & & & \\
\hline & & 6,600 & \multirow[b]{3}{*}{\[
\begin{aligned}
& 01.01 .05 \\
& 31.12 .05
\end{aligned}
\]} & \multirow{4}{*}{\begin{tabular}{l}
By Balance b/d \\
By Interest A/c
\end{tabular}} & 6,600 \\
\hline \multirow[t]{2}{*}{31.12.05} & \multirow[t]{2}{*}{To Cash A/c To Balance c/d} & 2,412 & & & 4,188 \\
\hline & & 2,194 & & & 418 \\
\hline \multirow{4}{*}{31.12.06} & \multirow{4}{*}{To Cash A/c} & 4,606 & \multirow{4}{*}{01.01.06} & & 4,606 \\
\hline & & 2,412 & & \multirow[t]{3}{*}{\begin{tabular}{l}
By Balance \(\mathrm{c} / \mathrm{d}\) \\
By Interest (Balancing figure)
\end{tabular}} & 2,194 \\
\hline & & & & & 218 \\
\hline & & 2,412 & & & 2,412 \\
\hline
\end{tabular}

Machine Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & Amount (\%) & Date & Particulars & Amount (₹) \\
\hline \multirow[t]{3}{*}{01.01.04} & \multirow[t]{3}{*}{To Shyam ltd} & 6,000 & \multirow[t]{3}{*}{\[
31.12 .04
\]} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Depreciation A/c \\
By Balance c/d
\end{tabular}} & 600 \\
\hline & & & & & 5,400 \\
\hline & & 6,000 & & & 6,000 \\
\hline \multirow[t]{3}{*}{1.1.05} & \multirow[t]{3}{*}{To Balance b/d} & 5,400 & \multirow[t]{3}{*}{31.12.05} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Depreciation A/c \\
By Balance c/d
\end{tabular}} & 600 \\
\hline & & & & & 4,800 \\
\hline & & 54,00 & & & 5,400 \\
\hline \multirow[t]{3}{*}{1.1.06} & \multirow[t]{3}{*}{To Balance b/d} & 4,800 & \multirow[t]{3}{*}{\[
31.12 .06
\]} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Depreciation A/c \\
By Balance c/d
\end{tabular}} & 600 \\
\hline & & & & & 4,200 \\
\hline & & 4,800 & & & 4,800 \\
\hline
\end{tabular}

\section*{Working Note:}
1. Computation of interest on instalment
\begin{tabular}{|c|c|}
\hline & ₹ \\
\hline Cash price & 6,000 \\
\hline Add: Interest on \(1^{\text {st }}\) Instalment ( \(10 \%\) of 6,000 ) & 600 \\
\hline & 6,600 \\
\hline Less: \(1^{\text {st }}\) Instalment & 2,412 \\
\hline & 4,188 \\
\hline Add: Int. on \(2^{\text {nd }}\) Instalment ( \(10 \%\) of 4,188) & 418 \\
\hline & 4,606 \\
\hline Less: \(2^{\text {nd }}\) Instalment & 2,412 \\
\hline & 2,194 \\
\hline Add: Int. on \(3^{\text {rd }}\) instalment & 218 \\
\hline & 2,412 \\
\hline
\end{tabular}

E
Example: (When Rate of Interest is not given)
On 1st January, 2004 ABC ltd. purchased a printing machine on hire purchase system from XYZ ltd. The payment was to be made at \(₹ 30,000\) down and the balance in three equal annual installments of ₹ 20,000 each, payable on \(31^{\text {st }}\) December. The Vendor Company charged interest @ \(8 \%\) p.a. ABC ltd provided depreciation @ \(10 \%\) p.a. on the diminishing balance and paid all the installments.

It closed its books on \(31^{\text {st }}\) December, every year. The cash down value of the machine was ₹ 81,543 .

Show the (a) XYZ ltd A/c and (b) Printing Machinery A/c in the books of ABC ltd for 3 years to \(31^{\text {st }}\) December, 2006.

\section*{In the books of ABC ltd.}

XYZ ltd Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & Amount (₹) & Date & Particulars & Amount (₹) \\
\hline \multirow[t]{4}{*}{\[
\begin{array}{|l|}
\hline 01.01 .04 \\
31.12 .04 \\
\prime \prime
\end{array}
\]} & \multirow[t]{4}{*}{\begin{tabular}{l}
To Cash A/c \\
To Cash A/c \\
To Balance c/d
\end{tabular}} & 30,000 & \multirow[t]{3}{*}{\[
\begin{aligned}
& \hline 01.01 .04 \\
& 31.12 .04
\end{aligned}
\]} & \multirow[t]{4}{*}{\begin{tabular}{l}
By Machine A/c \\
By Interest A/c
\end{tabular}} & \multirow[t]{3}{*}{\[
\begin{array}{r}
\hline 81,543 \\
4,123
\end{array}
\]} \\
\hline & & 20,000 & & & \\
\hline & & 35,666 & & & \\
\hline & & 85,666 & \multirow{4}{*}{\[
\begin{aligned}
& 01.01 .05 \\
& 31.12 .05
\end{aligned}
\]} & & 85,666 \\
\hline \multirow[t]{3}{*}{\[
\begin{array}{|l|}
\hline 31.12 .05 \\
\prime \prime
\end{array}
\]} & \multirow[t]{3}{*}{\begin{tabular}{l}
To Cash A/c \\
To Balance c/d
\end{tabular}} & 20,000 & & \multirow[t]{3}{*}{\begin{tabular}{l}
By Balance b/d \\
By Interest A/c
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{array}{r}
\hline 35,666 \\
2,853
\end{array}
\]} \\
\hline & & 18,519 & & & \\
\hline & & 38,519 & & & 38,519 \\
\hline \multirow[t]{3}{*}{31.12.06} & \multirow[t]{3}{*}{To Cash A/c} & 20,000 & \multirow[t]{3}{*}{01.01.06} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Balance c/d \\
By Interest (Balancing figure)
\end{tabular}} & 18,519 \\
\hline & & & & & 1,481 \\
\hline & & 20,000 & & & 20,000 \\
\hline
\end{tabular}

Printing Machine Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & Amount (₹) & Date & Particulars & Amount (₹) \\
\hline 01.01.04 & To Cash A/c & 30,000 & \multirow[t]{5}{*}{\[
\begin{aligned}
& \hline \begin{array}{l}
31.12 .04 \\
\prime \prime
\end{array} \\
& 31.12 .05 \\
& \prime \prime
\end{aligned}
\]} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Depreciation A/c \\
By Balance c/d
\end{tabular}} & 8,154 \\
\hline \multirow[t]{2}{*}{31.12.04} & \multirow[t]{2}{*}{To Cash A/c} & 15,877 & & & 37,723 \\
\hline & & 45,877 & & & 45,877 \\
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { 1.1.05 } \\
& 31.12 .05
\end{aligned}
\]} & \multirow[t]{3}{*}{To Balance b/d To Cash A/c} & 37,723 & & By Depreciation A/c & 7,339 \\
\hline & & 17,147 & & By Balance c/d & 47,531 \\
\hline & & 54,870 & \multirow{4}{*}{\[
\begin{aligned}
& 31.12 .06 \\
& \prime \prime
\end{aligned}
\]} & & 54,870 \\
\hline \multirow[t]{3}{*}{\[
\begin{array}{|l}
1.1 .06 \\
31.12 .06
\end{array}
\]} & \multirow[t]{3}{*}{To Balance b/d To Cash A/c} & 47,531 & & By Depreciation A/c & 6,605 \\
\hline & & 18,519 & & By Balance c/d & 59,445 \\
\hline & & 66,050 & & & 66,050 \\
\hline
\end{tabular}

\section*{Calculation of Interest}

If rate of interest is not given it is calculated as follows: Cash Price ₹ 15980, Hire Purchase Price ₹ 17,000.

Hire Purchase Price due:
At the end of \(1^{\text {st }}\) year \(17,000-4,000=\) 13,000

At the end of \(2^{\text {nd }}\) year \(13,000-6,000=\)
At the end of 3 rd year 7,000-5,000 =
Total Interest \(=17,000-15,980=\) 1,020

Divisible in the ratio of \(13000: 7000: 2000\)
i.e., \(13: 7: 2\)

\section*{Notes}
₹

Note: Interest for the final year is not to be calculated but the balancing figure is to be taken as an interest for that year.

\section*{When assets are recorded at cash price actually paid}

Under this method the entries are passed as and when the installments become due and the amount is paid towards the price of the article. The following journal entries are passed to record the hire purchase transactions:
1. No entry will be passed at the time of purchase of asset.
2. When down payment is made
\begin{tabular}{|l|l|l|l|}
\hline \begin{tabular}{l} 
Asset A/c \\
To Cash A/c \\
(Cash down payment)
\end{tabular} & & & \\
\hline
\end{tabular}
3. When instalment become due
\begin{tabular}{|ll|l|l|l|}
\hline Asset A/c (cash price) & Dr. & & \\
Interest A/c (interest on instalment) & Dr. & & & \\
To Hire Vendor A/c & & & & \\
(Instalment due including the interest on instalment) & & & & \\
\hline
\end{tabular}
4. When the first installment is paid
\begin{tabular}{|ll|l|l|l|}
\hline Hire Vendor A/c & Dr. & & & \\
To Bank A/c & & & & \\
(payment of \(1^{\text {st }}\) instalment) & & & & \\
\hline
\end{tabular}
5. For Depreciation charges
\begin{tabular}{|ll|l|l|l|}
\hline Depreciation A/c & Dr. & & & \\
To Asset A/c & & & & \\
(Depreciation charged on asset) & & & & \\
\hline
\end{tabular}


Caution It should be noted that though the asset account is debited with the amount of the cash price paid (not full cash price), the depreciation is charged on the full cash price.

\(=E\)
Example: Ram Ltd. bought on 1.1.04 a machine from Shyam Ltd. Under a hire purchase system of payment under which three annual installments of ₹ 2,412 would be paid. There is no down payment and the cash price is ₹ 6,000 . The rate of interest would be \(10 \%\) and depreciation @ \(10 \%\) p.a. would be charged on straight line basis.
Pass the necessary journal entries in the books of hire purchaser when the asset is recorded at cash price actually paid.

\section*{Solution:}

Journal Entries in the Books of Ram Ltd
\begin{tabular}{|c|c|c|c|}
\hline Date & Particulars & \[
\begin{gathered}
\hline \text { Amount } \\
\text { (Dr.) } \\
\hline
\end{gathered}
\] & Amount (Cr.) \\
\hline \multirow[t]{7}{*}{\[
\begin{gathered}
2004 \\
\text { Dec } \\
31
\end{gathered}
\]} & Machinery A/c Dr. & 1812 & \\
\hline & Interest A/c Dr. & 600 & \\
\hline & To Shyam Itd & & 2412 \\
\hline & & & \\
\hline & \begin{tabular}{l}
Shyam ltd A/c \\
To Bank A/c \\
(payment of \(1^{\text {st }}\) instalment)
\end{tabular} & 2412 & 2412 \\
\hline & \begin{tabular}{l}
Depreciation A/c \\
To Asset A/c \\
(Depreciation charged on asset at the rate of 10\%)
\end{tabular} & 600 & 600 \\
\hline &  & 1200 & \[
\begin{aligned}
& 600 \\
& 600
\end{aligned}
\] \\
\hline \multirow[t]{6}{*}{\[
\begin{gathered}
2005 \\
\text { Dec } \\
31
\end{gathered}
\]} & Machinery A/c Dr. & 1994 & \\
\hline & Interest A/c Dr. & 418 & \\
\hline & To Shyam Itd (being \(2^{\text {nd }}\) instalment due) & & 2412 \\
\hline & \begin{tabular}{l}
Shyam ltd A/c \\
To Bank A/c \\
(payment of \(2^{\text {nd }}\) instalment)
\end{tabular} & 2412 & 2412 \\
\hline & \begin{tabular}{l}
Depreciation A/c \\
To Asset A/c \\
(Depreciation charged on asset at the rate of \(10 \%\) )
\end{tabular} & 600 & 600 \\
\hline & \begin{tabular}{l}
Profit and loss A/c \\
To Depreciation A/c \\
To Interest A/c \\
(Interest and depreciation charges transferred to P\&L A/c)
\end{tabular} & 1018 & \[
\begin{aligned}
& 600 \\
& 418
\end{aligned}
\] \\
\hline \multirow[t]{6}{*}{\[
\begin{gathered}
2006 \\
\text { Dec } \\
31
\end{gathered}
\]} & Machinery A/c Dr. & 2194 & \\
\hline & Interest A/c Dr. & 218 & \\
\hline & To Shyam Itd (being \(3^{\text {rd }}\) instalment due) & & 2412 \\
\hline & \begin{tabular}{l}
Shyam ltd A/c \\
To Bank A/c \\
(payment of 3 rd instalment)
\end{tabular} & 2412 & 2412 \\
\hline & \begin{tabular}{l}
Depreciation A/c \\
To Asset A/c \\
(Depreciation charged on asset at the rate of \(10 \%\) )
\end{tabular} & 600 & 600 \\
\hline & Profit and loss A/c Dr.
To Depreciation A/c
To Interest A/c
(Interest and depreciation charges transferred to P\&L A/c) & 818 & \[
\begin{aligned}
& 600 \\
& 218
\end{aligned}
\] \\
\hline
\end{tabular}

\section*{Notes Working Notes:}
1. Depreciation should be charged on straight line method at the rate of \(10 \%\) on full cost price of ₹ 6000 .
2. Computation of interest on instalment
\begin{tabular}{|c|c|}
\hline & ₹ \\
\hline Cash price & 6000 \\
\hline Add: Interest on \(1^{\text {st }}\) Instalment ( \(10 \%\) of 6000) & 600 \\
\hline & 6600 \\
\hline Less: \(1^{\text {st }}\) Instalment & 2412 \\
\hline & 4188 \\
\hline Add: Int. on \(2^{\text {nd }}\) Instalment ( \(10 \%\) of 4188) & 418 \\
\hline & 4606 \\
\hline Less: \(2^{\text {nd }}\) Instalment & 2412 \\
\hline & 2194 \\
\hline Add: Int. on \(3^{\text {rd }}\) instalment & 218 \\
\hline & 2412 \\
\hline
\end{tabular}

\subsection*{12.2.2 Accounting Treatment in the Books of Vendor}

The following entries are passed by the vendor in their books of accounts to record the hire purchase transactions:
1. When goods are sold on Hire Purchase
\begin{tabular}{|l|l|l|l|l|}
\hline S. No. & Particulars & L.F. & Dr. & Cr. \\
\hline & \begin{tabular}{l} 
Hire Purchaser A/c \\
To Sales A/c \\
(Goods sold under hire purchase system)
\end{tabular} & Dr. & & \\
\\
\hline
\end{tabular}
2. For cash down payment
\begin{tabular}{|ll|l|l|l|}
\hline \begin{tabular}{l} 
Cash A/c \\
To Hire Purchaser A/c \\
(Cash down payment received)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}
3. On instalment becoming due
\begin{tabular}{|l|l|l|l|}
\hline \begin{tabular}{l} 
Hire Purchaser A/c \\
To Interest A/c \\
(Instalment due)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
4. When instalment received
\begin{tabular}{|ll|l|l|l|}
\hline \begin{tabular}{l} 
Bank A/c \\
To Hire Purchaser A/c \\
(amount received for instalment)
\end{tabular} & Dr. & & & \\
\hline
\end{tabular}

\subsection*{12.3 Computation of Cash Price}

Sometimes, the total cash price is not given. In such a situation we can not proceed with the accounting for hire purchase transaction because in the books of the buyer, the amount to be capitalised cannot be more than the cash price. The different methods of calculation of cash price are as below:
(i) Without using annuity table
(ii) With the help of annuity table

\subsection*{12.3.1 Without using Annuity Table}

Under this method the interest is calculated starting form the last instalment to first instalment. The interest is calculated on the outstanding amount of cash price. In order to compute the amount of cash price it is important to calculate the amount of interest included in instalment and then it is subtracted from the instalment amount. The following formula is used to compute the amount of interest:
\[
\text { Interest }=\text { Amount Due at the time of Instalment } \times \frac{\text { Rate of Interest }}{100+\text { Rate of Interest }}
\]


Example: X purchased a machine for manufacturing steel utensils on hire purchase system from Y. Payment was to be made as ₹ 18,000 at contract and three annual installments of ₹ 18,000 each. Interest charged @ \(20 \%\) p.a. which was included in the annual payments of ₹ 18,000 . Depreciation charged by X was \(10 \%\) on straight-line method.

Calculate the Cash Price of the Machine and prepare Machine Account and Y's Account in the books of X.
[Delhi, B.Com. (Pass), 1991 (B)]

\section*{Solution:}

In The books of X
Calculation of Cash Price
Hire purchase price of machine \(=18000+3 \times 18000=₹ 72,000\)
Interest at the end of each year \(=\frac{20}{120}\) or \(\frac{1}{6}\)
Hence Interest for the third year \(=18,000 \times \frac{1}{6}=₹ 3,000\)
Amount at the beginning of third year \(=15,000+18,000=₹ 33,000\)
Interest for second year \(=33,000 \times \frac{1}{6}=₹ 5,500\)

Notes Amount outstanding at the beginning of second year \(=27,500+18,000=₹ 45,500\)
Interest for first year \(=45,500 \times \frac{1}{6}=₹ 7,583\)
Amount outstanding at beginning of first year \(=37,917+18,000\)
\[
\text { = ₹ } 55,917 \text { or ₹ } 55,920
\]

\section*{Machine Account}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & ₹ & Date & Particulars & ₹ \\
\hline \(1{ }^{\text {st }}\) Year & \multirow{5}{*}{To Hire Vendor A/c} & \multirow{4}{*}{55,920} & \multirow[t]{5}{*}{\begin{tabular}{l}
1s Year \\
At the \\
End of \\
The Year
\end{tabular}} & \multirow{5}{*}{\[
\begin{array}{|l}
\text { By depreciation A/c } \\
\text { (P \& L A/c) } \\
" \text { Balance c/d }
\end{array}
\]} & \\
\hline At the & & & & & \\
\hline \multirow[t]{3}{*}{Beginning} & & & & & 5,592 \\
\hline & & & & & 50,328 \\
\hline & & 55,920 & & & 55,920 \\
\hline \(2^{\text {nd }}\) Year & \multirow[t]{4}{*}{To Balance b/d} & 50,328 & \multirow[t]{5}{*}{\begin{tabular}{l}
\(2^{\text {nd }}\) year \\
At the \\
End of \\
The year
\end{tabular}} & By Depreciation A/c & 5,592 \\
\hline At the & & & & ( P \& L A/c) & \\
\hline \multirow[t]{3}{*}{Beginning} & & & & \multirow[t]{2}{*}{" Balance c/d} & 44,736 \\
\hline & & & & & \\
\hline & \multirow{7}{*}{To Balance c/d} & 50,328 & & \multirow{7}{*}{\[
\begin{aligned}
& \text { By depreciation A/c } \\
& \text { (P \& L A/c ) } \\
& " \text { Balance c/d }
\end{aligned}
\]} & 50,328 \\
\hline \multirow[t]{6}{*}{\begin{tabular}{l}
3rd Year \\
At the \\
Beginning
\end{tabular}} & & & \multirow[t]{6}{*}{\begin{tabular}{l}
3rd Year \\
At the \\
End of \\
The year
\end{tabular}} & & \\
\hline & & & & & \\
\hline & & 44,736 & & & 5,592 \\
\hline & & & & & \\
\hline & & & & & 39,144 \\
\hline & & 44,736 & & & 44,736 \\
\hline
\end{tabular}

Y's Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & ₹ & Date & Particulars & ₹ \\
\hline \(1^{\text {st }}\) Year & To Cash & & \multirow[t]{5}{*}{\begin{tabular}{l}
\(1^{\text {st }}\) year \\
At the \\
Beginning \\
At the end
\end{tabular}} & \multirow{4}{*}{\begin{tabular}{l}
By Machine A/c \\
By Interest A/c
\end{tabular}} & \multirow{4}{*}{\[
\begin{array}{r}
55,920 \\
7,580
\end{array}
\]} \\
\hline At the & To Cash A/c & 18,000 & & & \\
\hline Beginning & To Cash A/c & 18,000 & & & \\
\hline \multirow[t]{2}{*}{At the end} & \multirow[t]{2}{*}{To Balance c/d} & 27,500 & & & \\
\hline & & 63,500 & & \multirow{5}{*}{\begin{tabular}{l}
By balance b/d \\
By Interest A/c
\end{tabular}} & 63,500 \\
\hline \multirow[t]{5}{*}{\begin{tabular}{l}
2nd Year \\
At the end
\end{tabular}} & \multirow{5}{*}{\begin{tabular}{l}
To Cash A/c \\
To Balance c/d
\end{tabular}} & & \multirow[t]{5}{*}{\begin{tabular}{l}
\(2^{\text {nd }}\) year \\
At the \\
Beginning \\
At the end
\end{tabular}} & & \multirow{4}{*}{\[
\begin{array}{r}
27,500 \\
5,500
\end{array}
\]} \\
\hline & & 18,000 & & & \\
\hline & & 15,000 & & & \\
\hline & & & & & \\
\hline & & 33,000 & & \multirow{6}{*}{\begin{tabular}{l}
By Balance \(\mathrm{b} / \mathrm{d}\) \\
By Interest A/c
\end{tabular}} & 33,000 \\
\hline \multirow[t]{5}{*}{\begin{tabular}{l}
3rd year \\
At the end
\end{tabular}} & \multirow{5}{*}{To Cash A/c} & & \multirow[t]{5}{*}{\begin{tabular}{l}
3rd year \\
At the \\
Beginning \\
At the end
\end{tabular}} & & \\
\hline & & 18,000 & & & 15,000 \\
\hline & & & & & 3,000 \\
\hline & & & & & \\
\hline & & 18,000 & & & 18,000 \\
\hline
\end{tabular}

\subsection*{12.3.2 Calculation of Cash Price with the Help of Annuity Tables}

It is easy to compute the amount of interest using the annuity table. With the help of annuity table the present value of each instalment can be calculated. Cash price is calculated by adding all these present value and cash down payment.


Cash Price \(=\) PV of all the Installments + Cash Down Payment

\(=\bar{z}\)Example: X Ltd. purchased a machine on hire purchase system. The payment is made as follows:
\begin{tabular}{lc} 
& \(₹\) \\
Down Payment & 1500 \\
1st Instalment & 2000 \\
2nd instalment & 2500 \\
3rd Instalment & 1500
\end{tabular}

The payments are made at the end of 1st year, 2nd year and 3rd year respectively.
The rate of interest is \(5 \%\) p.a, The annuity table shows that the present value of.
Re. 1 for one, two and three years is \(.9524, .9070\) and .8639 , respectively. Calculate the cash price of the machine.

\section*{Solution:}
\begin{tabular}{|l|c|c|c|}
\hline & \begin{tabular}{c} 
Instalment \\
(1)
\end{tabular} & \begin{tabular}{c} 
PV Factor \\
(2)
\end{tabular} & \begin{tabular}{c} 
PV of Instalment \\
(1) * (2)
\end{tabular} \\
\hline Cash Down & 1500 & 1 & 1500 \\
1st Instalment & 2000 & .9524 & 1904.8 \\
2nd Instalment & 2500 & .9070 & 2267.5 \\
3rd Instalment & 1500 & .8639 & 1295.85 \\
\hline Total Cash Price & & & \(\mathbf{6 9 6 8 . 1 5}\) \\
\hline
\end{tabular}

A purchased a truck on hire purchases system. The cash price of the truck was ₹ 74,500 . He paid ₹ 20,000 on signing of agreement and rest in three installments of ₹ 20,000 each. Calculate interest for each Year.
Hint: Total interest: ₹ 5500 divisible in the ratio of \(3: 2: 1\)

\section*{Self Assessment}

State whether the following statements are true or false:
9. In case, the price is not given, it is calculated with the help of \(1^{\text {st }}\) installment.
10. If the rate of interest not given, total interest is divisible equally.
11. Hire purchase and installment system are synonymous.

\section*{Notes}

\subsection*{12.4 Forfeiture of Goods by the Vendor or Repossession of Goods}

Possession of goods means physical holding of goods. You know that under hire purchase agreement the vendor transfers the possession of goods. He does not transfer the ownership, and if the hirer fails to pay even the last instalment he has the legal right to recover the possession of the goods. This act of recovery of possession is termed as 'repossession'.
The legal position of the hire vendor and hire purchaser (hirer) in case of default is complicated. The Hire Purchase Act of 1972 did codify this issue first, but as this Act was not put to operation, the legal position is not very clear. However, the relevant provisions of the said Act are discussed below:

\section*{Rights of the Hire Vendor}
1. Rights of hire vendor to terminate hire purchase agreement: Where the hirer makes more than one default in payment of instalment as provided in the agreement, the hire vendor (the owner) shall be entitled to terminate the agreement by giving the notice of termination in writing.
2. Rights of the hire vendor on termination: Where a hire purchase agreement is terminated, the hire vendor (the owner) shall be entitled:
(i) to enter the premises of the hirer and seize the goods,
(ii) to retain the hire charges already paid and to recover the arrears of hire charges due,
(iii) to claim damages for non-delivery of the goods.

\section*{Restrictions on the Owner}

The above rights of the owner are, however, subject to the following restrictions:
1. Rights of hirer in case of seizure of goods by the owner: where the owner seizes the goods lent under a hire purchase agreement, the hirer may recover from the owner the amount, if any, by which the hire purchase price falls short of the aggregate of two amounts:
(i) the amounts paid in respect of the hire purchase price up to the date of seizure; and
(ii) the value of the goods on the date of seizure.
2. Restrictions on owner's right to repossess: Where goods have been let under a hire purchase agreement, and the statutory amount of the hire purchase price has been paid, the owner shall not enforce any right to recover possession of the goods from the hirer otherwise than by 'verdict of any competent court.

In case the purchaser fails to pay any of the installments, the hire vendor can take back the possession of the goods, The amount already paid to the vendor as a part of the payment for the asset is treated as the hire charge. So, far as the repossession of goods is concerned the vendor can either take back the whole of the asset or a part of it. Let us now discuss what entries will be passed in base of:
(i) Complete repossession
(ii) Partial repossession.

The following example explains the accounting treatment of complete and partial repossession:

X purchased from Y three cars costing ₹ \(1,00,000\) each on hire purchase system. Payment was to be made; ₹ 60,000 down and balance in three equal installments together with interest at \(15 \%\) per annum. X provides depreciation at \(20 \%\) per annum on diminishing balance method. X paid the first installment at the end of the first year but could not pay the second installment, Y took possession of all the three cars. He spent ₹ 18,000 on repairs and sold them for ₹ \(1,50,000\).

Show the necessary ledger account in the books of both the parties.
[Delhi, B.Com. (Pass), 1995 (Supple.)]

\section*{Solution:}

\section*{In the books of Hire Purchaser \\ Cars Account}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & \(₹\) & Date & Particulars & \(₹\) \\
\hline \multirow[t]{3}{*}{I yr. 1.1} & \multirow[t]{3}{*}{To Hire Vendor A/c} & \multirow[t]{2}{*}{3,00,000} & \multirow[t]{3}{*}{I yr 31.12} & \multirow[t]{3}{*}{\begin{tabular}{l}
By Depreciation \\
By Balance c/d
\end{tabular}} & 60,000 \\
\hline & & & & & 2,40,000 \\
\hline & & 3,00,000 & & & 3,00,000 \\
\hline \multirow[t]{4}{*}{II yr. 1.1} & \multirow[t]{4}{*}{To Balance b/d} & 2,40,000 & \multirow[t]{4}{*}{II yr 31.12} & \multirow[t]{4}{*}{\begin{tabular}{l}
By Depreciation \\
By Hire Vendor A/c \\
By P \& L A/c (Loss on sale)
\end{tabular}} & 48,000 \\
\hline & & & & & 1,84,000 \\
\hline & & & & & 8,000 \\
\hline & & 2,40,000 & & & 2,40,000 \\
\hline
\end{tabular}

Hire Vendor Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & ₹ & Date & Particulars & ₹ \\
\hline I yr. & & & I yr. & & \\
\hline 1.1 & To Cash A/c & 60,000 & 1.1 & By Cars A/c & 3,00,000 \\
\hline 31.12 & To Cash A/c (80,000 + 36,000) & 1,16,000 & 31.12 & By Interest A/c & 36,000 \\
\hline " & To Balance c/d & 1,60,000 & \multirow{6}{*}{\[
\begin{aligned}
& \mathrm{II} \text { yr. } \\
& 31.12 \\
& 31.12
\end{aligned}
\]} & \multirow{6}{*}{\begin{tabular}{l}
By Balance b/d \\
By Interest A/c
\end{tabular}} & \\
\hline \multirow{5}{*}{\[
\begin{aligned}
& \text { II yr. } \\
& 1.1
\end{aligned}
\]} & \multirow{5}{*}{To Cars A/c} & 3,36,000 & & & 3,36,000 \\
\hline & & & & & \\
\hline & & 1,84,000 & & & 1,60,000 \\
\hline & & & & & 24,000 \\
\hline & & 1,84,000 & & & 1,84,000 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Year & Particulars & ₹ & Year & Particulars & ₹ \\
\hline I yr. & & & I yr. & & \\
\hline 1.1 & To Cars A/c & 3,00,000 & 1.1 & By Cash A/c & 60,000 \\
\hline 31.12 & To Interest A/c & 36,000 & 31.12 & By Cash A/c & 1,16,000 \\
\hline & & & \multirow{6}{*}{\[
\begin{aligned}
& \text { II yr. } \\
& 31.12
\end{aligned}
\]} & By Balance c/d & 1,60,000 \\
\hline \multirow{5}{*}{\[
\begin{array}{|l|}
\hline \text { II yr. } \\
1.1 \\
31.12
\end{array}
\]} & & 3,36,000 & & \multirow[t]{5}{*}{By Goods Repossessed A/c} & 3,36,000 \\
\hline & \multirow{4}{*}{\begin{tabular}{l}
To Balance b/d \\
To Interest
\end{tabular}} & & & & \\
\hline & & 1,60,000 & & & 1,84,000 \\
\hline & & 24,000 & & & \\
\hline & & 1,84,000 & & & 1,84,000 \\
\hline
\end{tabular}

Goods Repossessed Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Date & Particulars & ₹ & Date & Particulars & ₹ \\
\hline \multirow[t]{4}{*}{\[
\begin{aligned}
& \text { II Yr. } \\
& 31.12
\end{aligned}
\]} & \multirow{4}{*}{To Hire Purchase A/c To Cash (Repairs)} & & \multirow[t]{4}{*}{\[
\begin{aligned}
& \text { II yr. } \\
& 31.12
\end{aligned}
\]} & \multirow{4}{*}{\begin{tabular}{l}
By Cash (Sale) \\
By Profit \& Loss A/c (Loss)
\end{tabular}} & \\
\hline & & 1,84,000 & & & 1,50,000 \\
\hline & & 18,000 & & & 52,000 \\
\hline & & 2,02,000 & & & 2,02,000 \\
\hline
\end{tabular}

\section*{E}

Example: (Partial Repossession)
A Company purchased two machines of ₹ 10,500 each on hire purchase system, paying ₹ 6,000 down and remainder in three equal installments of ₹ 5,000 each together with interest at \(5 \%\) p.a. The company writes off depreciation at \(10 \%\) p.a. according to Diminishing Balance Method.

The company could not pay the second installment. The vendor left one machine with the company adjusting the value of the other against amount due taking the machine at \(20 \%\) depreciation at Diminishing Balance Method.

Prepare Ledger Account in the company's books.
[Delhi, B.Com. (Pass), 1990]

\section*{In the books of Hire Purchaser Machines Account}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Year & Particulars & ₹ & Year & Particulars & ₹ \\
\hline \(1{ }^{\text {st }}\) year & \multirow{4}{*}{To Hire Vendor A/c} & \multirow{3}{*}{21,000} & \multirow[t]{3}{*}{\begin{tabular}{l}
\(1^{\text {st }}\) year \\
At the end
\end{tabular}} & & \\
\hline At the & & & & By Depreciation A/c & 2,100 \\
\hline \multirow[t]{2}{*}{Beginning} & & & & By Balance c/d & 18,900 \\
\hline & & 21,000 & \multirow{6}{*}{\begin{tabular}{l}
\(2^{\text {nd }}\) year \\
At the end
\end{tabular}} & & 21,000 \\
\hline \multirow[t]{6}{*}{\begin{tabular}{l}
\(2^{\text {nd }}\) year \\
At the \\
Beginning
\end{tabular}} & \multirow[t]{6}{*}{To Balance b/d} & \multirow[t]{5}{*}{18,900} & & By Depreciation A/c & 1,890 \\
\hline & & & & By Hire Vendor A/c & 6,720 \\
\hline & & & & ( \(\mathrm{P} \& \mathrm{~L} \mathrm{~A} / \mathrm{c}\) ) & 1,785 \\
\hline & & & & (Loss on \(\mathrm{A} / \mathrm{c}\) of seizure) & \\
\hline & & & & By Balance c/d (2) & 8,505 \\
\hline & & 18,900 & & & 18,900 \\
\hline
\end{tabular}

Hire Vendor Account
\begin{tabular}{|c|c|c|c|c|c|}
\hline Year & Particulars & ₹ & Year & Particulars & ₹ \\
\hline \(1{ }^{\text {st }}\) year & & & \(1^{\text {st }}\) year & & \\
\hline At the & To Cash A/c & 6,000 & At the & & \\
\hline Beginning & To Cash A/c & 5,750 & Beginning & By Machinery A/c & 21,000 \\
\hline At the end & To Balance c/d & 10,000 & At the end & By Interest A/c 5\% on Rs. 15,000 & 750 \\
\hline & & 21,750 & & & 21,750 \\
\hline \(2^{\text {nd }}\) year & & & \(2^{\text {nd }}\) year & & \\
\hline At the end & \begin{tabular}{l}
To Machine A/c \\
(1)
\end{tabular} & 6,720 & At the & By Balance A/c & 10,000 \\
\hline " & To Balance c/d & 3,780 & \begin{tabular}{l}
Beginning \\
At the end
\end{tabular} & By Interest A/c & 500 \\
\hline & & 10,500 & & & 10,500 \\
\hline
\end{tabular}

Working Notes:
1. Revised price of 1 Machine seized

Cash Price of each Machine
(-) Depreciation for I year @ 20\%
on W.D.V.
(-) Depreciation for II year @ 20\% on W.D.V.
(-) Deprecition for 1 year @ 20\%

1,680
\(\overline{6,720}\)
\begin{tabular}{llr} 
2. & Value of 1 Machine retained & \(₹\) \\
& Cash Price of Machine & 10,500 \\
& \((-)\) Depreciation for I year & \(\overline{1,050}\) \\
& & 9,450 \\
& \((-)\) Depreciation for II year & \(\overline{945}\) \\
& Value of Machine I retained & 8,505 \\
& &
\end{tabular}

\section*{Self Assessment}
A. Multiple Choice Questions:
12. In case of hire purchases which account is debited?
(i) Hire Vendor A/c
(ii) Assets \(\mathrm{A} / \mathrm{c}\)
(iii) None of the above
13. In case of default of payment of installment. What is the right of the vendor?
(i) Filing a suit in the court for recovery
(ii) Repossess the goods immediately
(iii) Filing of suit as well as repossession of goods
B. Fill in the blanks:
14. If the hire purchaser fails to pay the installment due, the hire vendor's right is to
\(\qquad\) the goods.
15. The last installment is deducted from the preceding installment, difference is termed as
\(\qquad\)

\subsection*{12.5 Summary}
- Hire purchase is a mode of financing the price of the goods to be sold on a future date.
- In a hire purchase transaction, the goods are let on hire, the purchase price is to be paid in installments and hirer is allowed an option to purchase the goods by paying all the installments.
- Hire purchase is a method of selling goods. In a hire purchase transaction, the goods are let out on hire by a finance company (creditor) to the hire purchase customer (hirer).
- The buyer is required to pay an agreed amount in periodical installments during a given period.
- The ownership of the property remains with creditor and passes on to hirer on the payment of the last installment.
- A hire purchase agreement is defined in the Hire Purchase Act, 1972 as peculiar kind of transaction in which the goods are let on hire with an option to the hirer to purchase them.
- In an installment sale, the contract of sale is entered into the goods are delivered and the ownership is transferred to the buyer but the price is paid in specified installments over a period of time.

\subsection*{12.6 Keywords}

Accounting: Process of recording, measuring, interpreting, and communicating financial data for the purpose of decision-making.

Hire Purchase: Hire purchase is a mode of financing the price of the goods to be sold on a future date.

Installment Sale: In an installment sale, the contract of sale is entered when the goods are delivered and the ownership is transferred to the buyer but the price is paid in specified installments over a period of time.

\subsection*{12.7 Review Questions}
1. What journal entries are to be made in the books of the buyer and seller, When the goods are sold on hire purchase system? And the seller takes the possession of the goods on default of payment of installments by the hire buyer.
2. Distinguish between Hire Purchase and Instalment System of accounting.
3. Hire Purchases Ltd. purchased motor car on hire purchase system ₹ 12,000 was payable on delivery i.e., on 1.1.2005 and the rest in four, equal installments of ₹ 12,000 each payable at the end of each year. The seller, Hire Vendors Ltd. agreed to charge interest @ \(5 \%\) on-the yearly balances, the cash price of the car was ₹ 54,551 . Depreciation @ \(25 \%\) on written down values was to be written-off in each year.

Prepare the necessary journal entries and ledger accounts in the books of Hire Purchasers Ltd.
4. Dinesh Ltd., on April 1, 2003, purchased a machine from Rajesh Ltd., on hire purchase basis. The cash price of the machine was ₹ 25,000 . The payment was to be made ₹ 5,000 on the date of the contract and the balance in four annual installments of ₹ 5,000 each plus interest at \(5 \%\) per annum payable on December 31 each year, and the first such instalment being payable on 31.12 .2005 . Depreciation is to be charged @ \(10 \%\) on original cost, Show the journal entries and ledger accounts in the books of both the parties.
5. An engineering company purchased machine on Hire Purchase System over a period of three years paying ₹ 846 as initial payment on 1.1.2002 and further annual payments of \(₹ 2,000\) due on \(31.12 .2002,31.12 .2003\) and 31.12 .2004 . The cash price of the machine was ₹ 6,000 and the vendor company was to charge interest at \(8 \%\) p.a. on outstanding balances.
Show the appropriate ledger accounts in the books of the hire purchaser assuming depreciation @, \(10 \%\) p.a, was to be charged on the machine. Assume that capitalisation was to be done at the time of payment of each instalment.
6. A purchased four cars of \(₹ 14,000\) each on hire purchase system. The hire purchase price for all the four cars was ₹ 60,000 to be paid ₹ 15,000 down, and three installments of ₹ 15,000 each at the end of each year. Interest is charged at \(5 \%\) per annum and the buyer is depreciating cars at \(10 \%\) per annum on Straight Line Method.

After having paid down payment and first instalment, the buyer could not pay second instalment and the seller took possession of three cars at an agreed value to be calculated after depreciating cars at \(20 \%\) per annum on written down value method. One car was left with the buyer. The seller after spending ₹ 1,200 on repairing sold away all the three cars to A for ₹ 35,000 .

Open Ledger Account in the books of both the parties.

Notes 7. X Ltd. purchased three cars from Y Ltd. costing ₹ 75,000 each on hire purchase system. Payment was to be made for each car @ ₹ 45,000 down and the balance in three equal installments together with interest at \(12 \%\) p.a. X Ltd. writes off depreciation @ \(20 \%\) p.a. on diminishing balance. It paid the first instalment at the end of first year but could not pay the next. Y Ltd. left one car with the purchaser adjusting the value of the other two cars against the amount due. The cars were valued on the basis of \(30 \%\) depreciation annually on written down value.

Show the Car A/c and Seller's A/c in the books of X Ltd. Show your calculations clearly.
8. \(\quad \mathrm{X}\) purchased seven trucks on hire purchase on 1.7.2006. The cash price of each truck was ₹ 50,000 . He was to pay \(20 \%\) of the cash purchase price at the time of delivery and the balance in five half- yearly installments starting from 31.12.2006 with interest @ \(5 \%\) per annum.

On X's failure to pay the instalment due on 30.06 .2007 it was agreed that \(X\) would return three trucks to the vendor and the remaining four would be retained by him., The vendor agreed to allow him a credit for the amount paid against these three trucks less \(25 \%\). Show the relevant ledger accounts in the books of \(X\) assuming that his books are closed in June every year and deprecation @ 20\% is charged on Trucks.
9. Aman purchased machinery under the Hire Purchase Agreement from Rahul. The cash price of the machine was ₹ 15,000 . The payment for the purchase was to be made as follows: ₹ 3,000 on signing the agreement and ₹ 5,000 each at the end of first year, second year third year respectively. Calculate the amount of interest included in each instalment.
10. Make a distinguish between hire purchase and lease transactions.

\section*{Answers: Self Assessment}
\begin{tabular}{llll} 
1. & True & 2. & False \\
3. & False & 4. & True \\
5. & True & 6. & True \\
7. & False & 8. & False \\
9. & False & 10. & False \\
11. & False & 12. & Assets A/c \\
13. & Repossess the goods immediately & 14. & forfeit \\
15. & interest & &
\end{tabular}

\subsection*{12.8 Further Readings}
R.L. Gupta and Radhaswamy, Advanced Accountancy.
S. Bhat, Financial Management, Excel Books, New Delhi.
S.N. Maheswari, Management Accounting.
V.K. Goyal, Financial Accounting, Excel Books, New Delhi.

Online link
www.futureaccountant.com

\section*{Unit 13: Lease Purchase Accounts}
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\section*{Objectives}

After studying this unit, you will be able to:
- Define lease
- Explain the types and legal framework of leasing
- Make lease evaluation
- Illustrate the accounting treatment of lease transactions

\section*{Introduction}

Leasing has become a timely and flexible source of term financing for industries, especially when not everyone could have access to all types of projects and classes of assets. The practice of leasing is an age-old one. The leasing of lands and buildings were common. Leasing of equipments, plants and machineries are comparatively of recent development in India. Business communities facing tight money conditions have developed leasing as a method of funding. The use of leasing as a financing device runs as far back as the 1940s, though it emerged in India in an organized manner only in the early seventies.

The credit for inventing lease financing in its present form goes to the USA. There, it developed from the sale and lease back techniques utilized by the large departmental stores and supermarkets. Even before 1940s the idea was prevalent in chain grocery stores and in 1936 itself this type of financial leasing was used by Safeway Stores Inc. However, till the 1960s, leasing was looked at with suspicion as it was mostly identified with lack of commercial means to obtain financing. Only in 1963, did leasing begin to gain importance when permission was granted by the controller of currency of the US to the banks to engage in leasing of moveable properties? This afforded respectability to leasing as a financing method.

\section*{© \({ }^{2}\) \\ Did u know? Why Leasing?}

Acquisition of new plants and equipments are often required by business organizations. While it is necessary to see the profitability in investing on new equipment, one must equally be aware of the necessity to conserve cash resources to maintain liquidity. Under such circumstances, leasing arrangements may come in handy for various reasons.

\subsection*{13.1 Types of Lease}

Leasing is a unique type of commercial contract. Lease financing is often termed as equipment leasing and it is broadly classified into:
John J. Hampton classifies leases into three basic types; they are:
(a) Operating Lease: In operating lease, the lease is usually for a shorter term and is generally cancellable. As the asset is leasable repeatedly to several persons, the operating lease is usually said to be a non-payout lease.
(b) Service Lease: It is an equipment leasing under which the lessor provides financing as well as servicing of the assets during the lease period. The lessor will covenant with the lessee to provide maintenance and servicing of the leased asset during the existence of the lease.
(c) Financial Lease: Financial lease is a long-term lease usually coinciding with the economic life of the asset and is non-cancellable. It operates as a long-term debt financing and is usually full-payout as in contrast to operating lease, it is usually a single lease repaying the cost of the asset. They play a major role in financing of building of buildings and equipments to industries.

Finance vs Operating Lease
\begin{tabular}{|l|l|}
\hline \multicolumn{1}{|c|}{ Financial Lease } & \multicolumn{1}{c|}{ Operating Lease } \\
\hline \begin{tabular}{l} 
1. The leased asset is use-specific. \\
Usually the lessor buys the asset \\
identified by the lessee and leases out \\
to him.
\end{tabular} & \begin{tabular}{l} 
1. The leased asset is of common-use \\
activity. The lessor already owns the \\
asset and leases it out to several users \\
successively.
\end{tabular} \\
\hline \begin{tabular}{l} 
2. The risks and rewards incidental to \\
ownership are passed on to the lessee. \\
The lessor only remains the legal \\
owner of the asset.
\end{tabular} & \begin{tabular}{l} 
2. \begin{tabular}{l} 
The lessee is given the use of the asset for \\
certain period. Ownership and benefits \\
and risks associated with it remain with \\
the lessor.
\end{tabular} \\
\hline
\end{tabular} \\
\hline
\end{tabular}

Notes
3. Therefore, the lessee bears the risk of obsolescence. He is responsible for maintenance, insurance, taxes, etc.
4. It is an intermediate to long-term lease essentially covering the expected useful life of the asset.
5. During the primary lease period, usually the initial 3 or 5 or 8 years, the lease cannot be cancelled.
6. The lessors' capital outlay is fully amortized during the primary lease period. During a single lease, the lessor recovers through the lease rentals his investment on the leased asset along with interest and profit. Hence, it is called full-pay-out lease.
7. A financial lease is basically a debt equivalent i.e. it is a form of borrowing in disguise. Since, it is a financing decision, the lessee has to decide whether to lease or borrow and buy the asset.
8. The lessor takes the role of a financier. Usually, the lessor is a financial institution and cannot render specialized service connection with the asset.
9. This type of lease is generally suitable for equipment that is tailor-made and does not have ready resale or release market, e.g. heavy machines, etc.
3. Therefore, the lessor bears the risk of obsolescence. He is responsible for maintenance, insurance, tax, etc.
4. It is a short-term lease, the lease period being significantly less than the useful life of the asset.
5. The lease is usually cancellable at short notice.
6. The lessors' capital outlay is not fully amortized during the period of a single lease. The lease rentals recovered during a lease-period are not sufficient to cover fully the cost of leased asset along with an acceptable return thereon. Hence, it is called a non-payout lease
7. An operating lease is basically a rental agreement. Since it is an investment decision, the lessee has to decide whether to lease or buy the asset.
8. The lessor is specialized in handling and operating the particular asset and usually provides in specialized services.
9. This type of lease is suitable for equipment that has longer economic life and ready resale or re-lease market i.e., automobiles, computers and office equipments.

\section*{Self Assessment}

Fill the blanks:
1. In operating lease, the lease is usually for a shorter term and is generally \(\qquad\)
2. .................... is an equipment leasing under which the lessor provides financing as well as servicing of the assets during the lease period.
3. Financial lease is a \(\qquad\) lease usually coinciding with the economic life of the asset and is non-cancellable.
4. In \(\qquad\) the risks and rewards incidental to ownership are passed on to the lessee.
5. An \(\qquad\) lease is basically a rental agreement.

\subsection*{13.2 Legal Framework of Leasing}

The legal provisioning of lease financing covers the following:

\subsection*{13.2.1 Definition}

Leasing is a contractual transaction in which the owner of an asset (called lessor) gives the same to another party (called lessee) the right to use it for a specified period of time (called lease period) in consideration of certain payments (called lease rentals). The International Accounting Standard No. 17 (IAS - No.17) defines Leasing as "an agreement whereby the Lessor conveys, to the lessee in return for rent, the right to use an asset for an agreed period of time."

\subsection*{13.2.2 Features}
(i) The Parties: There are mainly two parties - lessor and lessee. In a type of lease called 'Leveraged Lease', there is a third party, the financier, who provides the whole or part of the finance needed for acquiring the asset. A lessor may be a leasing company, a manufacturer, a banker or a subsidiary or an associate. A lessee may be a company, a co-operative society, a firm, an individual, the government or its agencies.
(ii) The Asset: The subject of lease transactions is a tangible asset, which can be anything ranging from a plant to an aircraft, land, building or an industry, etc.
(iii) The Agreement: Written lease agreement is not a legal necessity. It is desirable to execute a written lease agreement when the period is large and considerations complex. Such written agreements attract stamp duty according to the rates prescribed in respective statutes.
(iv) The Period: The term of a lease is the period for which the lease agreement will be in operation. When the lease period expires the asset reverts back to the lessor.
(v) The Rent: The lease rentals are the regular fixed payments made by the lessee over a period of time at the beginning or at the end of say a month, a quarter, a half-year or year. The same may be based on the cost of lessor's investment, depreciation in the asset other service charges if any. Although generally fixed, the amount and timing of lease rentals can be tailored to the lessee's cash flows. In up-fronted leases, more rentals are charged in the initial years and less in the later years of the contract. The opposite happens in backended leases. Sometimes, the lease contract is divided into two parts - primary lease and secondary lease - for the purpose of lease rentals. Primary lease provides for the recovery of the cost of the asset and profit through lease rentals during a period of about five years. It may be followed by a perpetual secondary lease on nominal lease rentals. Various other combinations are also possible.
(vi) The use: In a lease transaction, the lessee (user) acquires only the usage or custody of the asset and is not the owner thereof. Legal ownership vests with the lessor. As the legal owner, it is the lessor not the lessee, who is entitled to claim depreciation of leased asset. Although, the lessor is the legal owner of a leased asset, the lessee bears the risk and enjoys the return. Leasing separates ownership and use as two economic activities and facilitates asset use without ownership.

\section*{Notes \\ 13.2.3 Modus Operandi}

Lease financing normally goes through the following stages:
- The lessee selects the asset. This involves specification of the asset item, supplier, price, terms of warranties, delivery period, installation and service, etc. The lessor normally does not involve himself at this stage.
- The lessee approaches the lessor (s) and submits the formal application.
- Terms of lessee are negotiated and finalised with the lessor offering the best.
- The lessor and lessee sign the lease agreement giving details such as length of the lease period, the distribution of rentals, mechanism of collection of rentals, etc. The lessee assigns purchase rights to the lessor.
- The lessor purchases the asset from the manufacturer/dealer.
- The asset is delivered to the lessee who issues a certificate to the lessor for having inspected the asset and conforming to the specifications.
- The assignable guarantees and service terms are passed on to the lessee. The lessee insures the equipment and endorses the insurance policy in favour of the lessor.
- During the lease period, the lessee pays the rental regularly as agreed upon and enjoys the use of the asset.
- At the end of the lease period, the asset is transferred back to the lessor. However, in longterm lease contracts, the lessee may be given an option to buy or renew the lease.

\section*{Self Assessment}

State whether the following statements are true or false:
6. Under a lease contract lessee is the owner of the asset.
7. In a lease transaction, the user acquires only the usage or custody of the asset and is not the owner thereof.
8. The lease rentals are the regular fixed payments made by the lessee over a period of time.
9. The subject of lease transactions is an intangible asset.

\subsection*{13.3 Computation of Lease Rental}

While pricing, the lessor has to consider the following:
(i) The rates should be competitive;
(ii) The rates should be adequate to earn a reasonable (risk adjusted) rate of return on investment.

The lessor calculates as follows the present value of cash inflows arising from his ownership of the asset.
\[
\sum_{t=1}^{n} \frac{\operatorname{Dt}(T)}{(1+K)^{t}}+\frac{(S V)_{n}}{(1+K)^{n}}
\]
\(D=\) Depreciation charge for year ' t ' which varies from 1 to n
\(\mathrm{T}=\) Lessor's tax-rate
\(K=\) Lessors' post-tax required rate of return
\(\mathrm{n}=\) Duration of the primary lease period
\(\mathrm{SVn}=\) Net Salvage/residual value after the primary lease period.
The net recovery through lease rentals should be equal to cost of leased asset (net of initial deposit) minus the present value of ownership benefits.
The Post-Tax Lease Rental (PTLR) can be worked out as:
\[
\text { PTLR }=\frac{\text { Net recovery of lease rentals }}{\text { PVIFA }}
\]

Where \(K=\) required post-tax rate of return duration of the primary lease period Present Value Interest Factor for Annuity.
\(\mathrm{n}=\) duration of the primary lease period
PVIFA = Present Value Interest Factor for Annuity
The actual return of the lessor will also depend upon the timing of rental payments. So the cash inflows by way of lease rentals may be discounted at appropriate post-tax rate of return. The present value of all these lease rentals should be equal to the net recovery through lease rentals.

Post tax lease rentals is adjusted for the tax factor to get the lease rentals (LR) as follows:
\[
\mathrm{LR}=\frac{\mathrm{PTLR}}{1-\operatorname{tax} \text { rate }}
\]

EF
Example: Mysore Limited is faced with a decision to purchase or acquire on lease a mini car. The cost of the mini car is ₹ \(1,26,965\). It has a life of 5 years. The mini car can be obtained on lease by paying equal lease rentals annually. The leasing company desires a return of \(10 \%\) on the gross value of the asset. Mysore Limited can also obtain \(100 \%\) finance from its regular banking channel. The rate of interest will be \(15 \%\) p.a. and the loan will be paid in five annual equal installments, inclusive of interest. The effective tax rate of the company is \(40 \%\). For the purpose of taxation it is to be assumed that the asset will be written off over a period of 5 years on a straight-line basis.
(a) Advise Mysore Limited about the method of acquiring the car.
(b) What should be the annual lease rental to be charged by the leasing company to match the loan option?

For your exercise, use the following discount factors:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Discount rate & Year 1 & Year 2 & Year 3 & Year 4 & Year 5 \\
\hline \(10 \%\) & 0.91 & 0.83 & 0.75 & 0.68 & 0.62 \\
\hline \(15 \%\) & 0.87 & 0.76 & 0.66 & 0.57 & 0.49 \\
\hline \(9 \%\) & 0.92 & 0.84 & 0.77 & 0.71 & 0.65 \\
\hline
\end{tabular}

\section*{Notes}

\section*{Solution:}
(a) Annual loan repayment \(=\frac{\text { Loan amount }}{\text { Annuity factor of } 15 \%}=\frac{₹ 1,26,965}{3.86}=₹ 32,892\)

Note: Annuity factor is based on the assumption that loan instalment is repaid at the beginning of the year to be at par with lease rentals. Such annuity factor at \(15 \%\) works out to be 3.86 .
\begin{tabular}{|l|r|c|c|c|c|}
\hline \multicolumn{1}{|c|}{ Year } & \multicolumn{1}{c|}{\(\mathbf{0}\)} & \multicolumn{1}{c|}{\(\mathbf{1}\)} & \multicolumn{1}{c|}{\(\mathbf{2}\)} & \multicolumn{1}{c|}{\(\mathbf{3}\)} & \multicolumn{1}{c|}{\(\mathbf{4}\)} \\
\hline Opening balance of principal & \(1,26,965\) & 94,073 & 75,292 & 53,694 & 28,856 \\
\hline Interest @ 15\% & Nil & 14,111 & 11,294 & 8,054 & 4,036 \\
\hline Total & \(1,26,965\) & \(1,08,184\) & 86,586 & 61,748 & 32,892 \\
\hline Repayment of instalment & 32,892 & 32,892 & 32,892 & 32,892 & 32,892 \\
\hline Closing balance & 94,073 & 75,292 & 53,694 & 28,556 & Nil \\
\hline
\end{tabular}

Difference between the instalment amount and opening balance of 4th year
Schedule of Cash Outflows in Debt Financing
\begin{tabular}{|c|r|r|r|r|r|r|r|}
\hline \begin{tabular}{c} 
End of \\
year
\end{tabular} & \begin{tabular}{c} 
Loan \\
repayment
\end{tabular} & \begin{tabular}{c} 
Interest @ \\
\(\mathbf{1 5 \%}\)
\end{tabular} & Depreciation & \multicolumn{1}{c|}{\begin{tabular}{c} 
Tax \\
shield
\end{tabular}} & \begin{tabular}{c} 
Net cash \\
outflows \\
\((\mathbf{1})-(4)\)
\end{tabular} & \begin{tabular}{c} 
PV factor \\
@ 9\%
\end{tabular} & \begin{tabular}{c} 
P.V. of \\
cash \\
outflows
\end{tabular} \\
\hline 0 & 32,892 & - & - & - & 32,892 & 1.00 & 32,892 \\
\hline 1 & 32,892 & 14,111 & 25,393 & 15,802 & 17,090 & 0.92 & 15,723 \\
\hline 2 & 32,892 & 11,294 & 25,393 & 14,675 & 18,217 & 0.84 & 15,302 \\
\hline 3 & 32,892 & 8,054 & 25,393 & 13,379 & 19,513 & 0.77 & 15,025 \\
\hline 4 & 32,892 & 4.036 & 25,393 & 11,772 & 21,120 & 0.71 & 14,995 \\
\hline 5 & 32,892 & & \(-25,393\) & 10,157 & \((10,157)\) & 0.65 & \((6,602)\) \\
\hline
\end{tabular}

Total present value of cash outflows: ₹ 87,335
(a) Annual lease rentals \(=\frac{\text { Cost of assets }}{\text { Annuity factor of } 10 \%}=\frac{₹ 1,26,965}{4.17}=₹ 30,447\)

Schedule of Cash Outflows - Leasing Alternative
\begin{tabular}{|r|r|r|r|r|r|}
\hline \begin{tabular}{c} 
End of the \\
year
\end{tabular} & \begin{tabular}{c} 
Lease \\
payment
\end{tabular} & Tax shield & \begin{tabular}{c} 
After tax cash \\
outflows
\end{tabular} & \multicolumn{1}{c|}{\begin{tabular}{c} 
PV factors \\
at 9\%
\end{tabular}} & \begin{tabular}{c} 
Present value of \\
cash out flows
\end{tabular} \\
\hline 0 & 30,447 & - & 30,447 & 1.00 & 30,447 \\
\hline \(1-4\) & 30,447 & 12,179 & 18,268 & 3.24 & 59,188 \\
\hline 5 & - & 12,179 & \((12,179)\) & 0.65 & \((7,916)\) \\
\hline \multicolumn{6}{|l}{} \\
\hline \multicolumn{6}{|l|}{ Total present value of cash outflows \(=81,719\)}
\end{tabular}

Decision: The present value of cash outflow under lease financing is ₹ 81,719 while that of debt financing (i.e., owning the asset) is ₹ 87,335 . Thus leasing has an advantage over ownership in this case.
(b) Let the Annual Rental be ' \(x\) '

Therefore the after tax cost of lease rentals will be 0.60x
Present value will be 0.60 ? \(\mathrm{X} 4.17=2,502 x\)
Equating 2,502x = ₹ 87,335
The value of x is obtained at ₹ 34,906
Therefore, the lease rentals should be ₹ 34,906 to match the loan option

Example: Zonal garment factory needs an equipment for use. It has the option of outright purchase or leasing the equipment. The data are given below. Recommend the best option that the factory should choose.

\section*{Option 1}

Purchase outright for a cost of ₹ 80 lakhs. It is to be entirely financed by a term loan @ \(18 \%\) p.a. interest and outstanding payable on a yearly basis. The term loan is to be repaid in eight equal installments of ₹ 10 lakhs each, beginning from second year-end. The economic life of the equipment is assessed to be ten years. The equipment will be depreciated @ \(10 \%\) p.a. on a straight-line basis, with insignificant salvage value at the end of the economic life.

The estimated maintenance expenses would be as detailed below:
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Year & \(\mathbf{1}\) & \(\mathbf{2}\) & \(\mathbf{3}\) & \(\mathbf{4}\) & \(\mathbf{5}\) & \(\mathbf{6}\) & \(\mathbf{7}\) & \(\mathbf{8}\) & \(\mathbf{9}\) & \(\mathbf{1 0}\) \\
\hline MC & 4.00 & 4.40 & 4.88 & 5.47 & 6.18 & 7.05 & 8.11 & 9.41 & 11.01 & 13.00 \\
\hline
\end{tabular}
(*) MC - Maintenance cost in ₹ lakhs
Option 2
The equipment may be leased for a ten-year period. The lessor will do the maintenance of the equipment. The lessee has to pay ₹ 18 lakhs annual rental at the beginning of each year over the lease period.
Note: Assume that the lessee is in a tax bracket of \(50 \%\) and average cost of capital of the lessee firm as \(14 \%\) p.a.

Notes Present value factors for discounting at \(14 \%\) p.a. given below may be used for ready reference:
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \(\mathbf{1}\) & \(\mathbf{2}\) & \(\mathbf{3}\) & \(\mathbf{4}\) & \(\mathbf{5}\) & \(\mathbf{6}\) & \(\mathbf{7}\) & \(\mathbf{8}\) & \(\mathbf{9}\) & \(\mathbf{1 0}\) \\
\hline .877 & .769 & .675 & .592 & .519 & .465 & .400 & .351 & .308 & .270 \\
\hline
\end{tabular}

\section*{Solution:}

Option 1: Purchase
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Year & Loan repaid & Amount balance & Interest on balance & Maintenance & Interest +
Maintenance
+
Depreciation & Tax saved
\(50 \%\) & Outflow Interest + Maintenance & Total outflow \\
\hline 1 & . & & & & 26.40 & 13.20 & 5.20 & 5.20 \\
\hline 2 & 10 & & & & 26.80 & 13.40 & 5.40 & 15.40 \\
\hline 3 & 10 & & & 4.88 & 25.48 & 12.74 & 4.74 & 14.74 \\
\hline 4 & 10 & & & 5.47 & 24.27 & 12.13 & 4.14 & 14.14 \\
\hline 5 & 10 & & & 6.18 & 23.18 & 11.59 & 3.59 & 13.59 \\
\hline 6 & 10 & & & 7.05 & 22.25 & 22.25 & 11.13 & 13.13 \\
\hline 7 & 10 & & & 8.11 & 21.51 & 10.76 & 2.76 & 12.76 \\
\hline 8 & 10 & & & 9.41 & 21.01 & 10.50 & 2.50 & 12.50 \\
\hline 9 & 10 & & & 11.01 & 20.81 & 10.41 & 2.41 & 12.41 \\
\hline 10 & - & - & & 13.00 & 21.00 & 10.50 & 2.50 & 2.50 \\
\hline
\end{tabular}

Calculation of Present Value
\begin{tabular}{|c|c|c|c|}
\hline Year & Total cash outflow & DCF @ 14\% & Present value \\
\hline 1 & 5.20 & \(0 . .877\) & 4.56 \\
\hline 2 & 15.40 & 0.769 & 11.84 \\
\hline 3 & 14.74 & 0.675 & 9.95 \\
\hline 4 & 14.14 & 0.592 & 8.37 \\
\hline 5 & 13.59 & 0.519 & 7.05 \\
\hline 6 & 13.13 & 0.465 & 6.11 \\
\hline 7 & 12.76 & 0.400 & 5.10 \\
\hline 8 & 12.50 & 0.351 & 4.39 \\
\hline 9 & 12.41 & 0.308 & 3.82 \\
\hline 10 & 2.50 & 0.270 & 0.67 \\
\hline \multicolumn{4}{|l|}{} \\
\hline
\end{tabular}

Option 2: Lease
\begin{tabular}{|c|c|c|c|c|}
\hline Year & Lease rent & Lease rent after tax shield & DCF @ 14\% & Present value \\
\hline 1 & 18 & 9 & 1.000 & 9.00 \\
\hline 2 & 18 & 9 & \(0 . .877\) & 7.89 \\
\hline 3 & 18 & 9 & 0.769 & 6.92 \\
\hline 4 & 18 & 9 & 0.675 & 6.07 \\
\hline 5 & 18 & 9 & 0.592 & 5.33 \\
\hline 6 & 18 & 9 & 0.519 & 4.67 \\
\hline 7 & 18 & 9 & 0.465 & 4.19 \\
\hline 8 & 18 & 9 & 0.400 & 3.60 \\
\hline 9 & 18 & 9 & 0.351 & 3.16 \\
\hline 10 & 18 & 9 & 0.308 & 2.77 \\
\hline \multicolumn{6}{|l|}{} \\
\hline \multicolumn{1}{|c|}{\begin{tabular}{l} 
Total present value of cash outflows \(=53.60\) \\
\hline
\end{tabular}}
\end{tabular}

Analysis: The present value of net cash flows is lowest for lease option. Hence it is suggested to take equipment on lease basis.

Task RKV Ltd. is considering the possibility of purchasing a multipurpose machine which cost ₹ 10 lakhs. The machine has an expected life of 5 years. The machine generates ₹ 6 lakhs per year before depreciation and tax and the management wishes to dispose the machine at the end of 5 years, which will fetch ₹ 1 lakh. The depreciation allowable for the machine is \(25 \%\) on written down value and the company's tax rate is \(50 \%\). The company approached a NBFC for a five-year lease for financing the asset, which quoted a rate of ₹ 28 per thousand per month. The company wants you to evaluate the proposal with purchase option. The cost of capital of the company is \(12 \%\) and for lease option it wants you to consider a discount rate of \(16 \%\).
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline & \(\mathbf{0}\) & \(\mathbf{1}\) & \(\mathbf{2}\) & \(\mathbf{3}\) & \(\mathbf{4}\) & \(\mathbf{5}\) \\
\hline PV@ 12\% & 1,000 & 0.893 & .797 & 0.712 & 0.636 & 0.567 \\
\hline PV@ 16\% & 1,000 & 0.862 & 0.743 & 0.641 & 0.552 & 0.476 \\
\hline
\end{tabular}

\section*{Self Assessment}

Fill in the blanks:
10. The net recovery through lease rentals should be equal to cost of leased asset (net of initial deposit) minus the \(\qquad\) of ownership benefits.
11. The actual return of the lessor will also depend upon the timing of \(\qquad\) payments.
12. The cash inflows by way of lease rentals may be discounted at appropriate \(\qquad\)

\section*{Notes 13.4 Lease Evaluation}

A leasing transaction has to be beneficial to both the lessee and lessor. Each party evaluates the transaction from his points of view and arrives at the cost-benefit analysis. Let us understand their viewpoints and techniques used to evaluate a lease transaction.

\subsection*{13.4.1 Lessee's Perspective}

There are many models to evaluate a lease from lessee's angle. Some treat leasing as a finance decision and compare the advantages of buying and leasing according to discounted cash flow technique, using either Net Present Value (NPV) or Internal Rate of Return (IRR) method. Some treat leasing as an investment decision while some others treat leasing as financial-cuminvestment decision.

After establishing the economic viability of acquiring an asset, a lessee has to weigh the various options to finance such acquisition. The cost of alternative sources of finance - through cash accrual, hire-purchase, leasing, public deposits, share capital, debentures, term loans, deferred credit, etc. - has to be kept is mind. Broadly the decision variables boil down to 'buy' or lease'.

\section*{Buy or Lease}

The following features of 'buying' and 'leasing' are noted for comparing both the options.
\begin{tabular}{|lll|}
\hline Features & Buying & Leasing \\
Initial cost/Deposit & Incurred (cash outflows) & Not incurred \\
Depreciation charges & Available (cash inflows) & Not available \\
Residual value & Available (cash inflows) & Not available \\
Management fees and lease rentals. & Not payable. & Payable (cash outflows). \\
\hline
\end{tabular}

Once the lessee accepts leasing as a financing proposition, for the sake of comparison, we limit ourselves to after-tax cash flows. Let us evaluate separately under NPV and IRR method.

Once the lessee accepts leasing as a financing proposition, for the sake of comparison, we limit ourselves to after-tax cash flows. Let us evaluate separately under NPV and IRR method.

\section*{NPV Method}

Under this method, the present value of cash flows associated with the buying and leasing alternatives are independently ascertained and compared. The alternative that shows higher NPV is preferred. But the basic question is to decide the rate at which the cash flows will be discounted to arrive at the Net Present Values. However, we can evaluate a 'Buy or Lease' preposition by assuming certain discount rate as worked out in the following cases.

\(==\)
Example: A firm wishes to acquire a machine costing ₹ 12000. It has two options. It can acquire the machine by borrowing ₹ 10000 and meeting the balance as margin from own sources. The loan is repayable in 5 year-end installments at an interest rate of \(15 \%\) p.a. Alternatively, it can lease-in the asset at yearly rental of ₹ 3200 payable at year-end. The firm can claim \(25 \%\) depreciation on WDV method. It also has an effective tax rate of \(50 \%\) and expects a discounting rate of \(18 \%\). Let us assume that at the end of 5th year, the machine is sold for ₹ 4000 and the excess realization, if any over the written down value is subject to tax. Which option is advisable for the firm?

\section*{Solution:}

Since there is no cash inflow, the net post-tax discounted cash flow under lease' option is \(₹ 5003.47\) which is lesser than the net post-tax discounted cash outflow of \(₹ 5191.91\) under 'Borrow and Buy' option. Hence, leasing should be advisable for the firm in the above example.

\section*{IRR Method}

Under this method, a lessee's evaluation will proceed as follows:
(i) IRR under the 'buying' alternative is computed.
(ii) IRR under the 'leasing' alternative is computed. IRR computation is made based upon the post-tax net cash outflows.
(iii) A choice between buying and leasing is taken by comparing the IRR under the two alternatives. The alternative having a higher IRR is preferred.

Caution In the IRR analysis, the lessee's evaluation is based on cash flows associated with various options. But the effect of other variables like lease management fee, sales tax on lease rental, lessee's tax position, issues relating to flexibility of lease agreement in the event of contingencies, alternative sources and cost of capital, lessee's capital structure, urgency of finance, etc., will influence the decision to 'buy or lease.'

\subsection*{13.4.2 Lessor's Perspective}

While evaluating a lease, a lessor faces a problem of whether to accept a lease plan or not, or which plan among the various alternatives to accept, or how to quote lease rates. In answering these questions, lessors commonly adopt the technique of Internal Rate of Return (IRR). This simple analytical technique of capital budgeting is used since a lessor's expected cash inflows and outflows are known with near certainty. IRR is the rate which discounts these cash flows to zero. If this IRR is higher than the weighted after-tax average cost of capital (of the lessor), the lease plan is accepted.

\section*{Cash Inflows}

The lessors' inflows from a financial lease are:
(i) Initial/security deposit, (ii) Lease rentals, (iii) Management fees, (iv) Tax benefit on account of depreciation, etc. (v) Salvage/residual value at the termination of agreement.

\section*{Cash Outflows}

The following outflows are most perceptible in a lease deal.
(i) Purchase cost of the asset, (ii) Financing cost, (iii) Administrative charges, (iv) Tax outflows, including sales tax.

\section*{Cost of Capital}

The cost of leasing relates directly to the cost of the lease to the lessor. Lessor view investing in a lease the same way the lenders evaluate the loans or investment judge investments. At the time of a lease deal the lessor receives some initial deposit from the lessee. Rent is a function of the lessor's investment risk and cost. The cost of capital includes both the debt and equity fund.

\section*{Notes \\ Risk Factor}

Apart from considering the cash inflows arising from leasing out the assets, the lessor also makes an assessment of the risk involved in the transaction. A lease is similar to a term loan in the form of an asset. Hence, while appraising a lessee, a lessor will apply the sound principles of lending as a banker does. Depending upon his risk perception on the lessee, the lessor may demand higher rentals, increased initial/security deposit, personal guarantees, shorter lease term, additional collateral security, etc.

舀Example: Let us take an example to evaluate a lease plan from lessors' perspective using IRR technique.

A firm wishes to let on lease a machine costing ₹ 1 lakh financed \(75 \%\) through debt and the balance through equity. Pre-tax explicit cost of debt is \(18 \%\) and that of equity is \(15 \%\) per annum.

The firm has an effective tax rate of \(45 \%\) and can claim \(25 \%\) on WDV method. The residual value of the machine is ₹ 15,000 at the end of 5th year. The lessor has to spend \(₹ 2000\) per year towards maintenance of machine and administration. The lessee agrees to pay annual year-end rent of ₹ 35,000 for 5 years; security deposit of \(₹ 1000\) and one-time management fee of \(₹ 1000\) at the beginning of the lease. Is the above plan beneficial to the lessor?

\section*{Solution:}

The lessor's cash flow profile:
(i) Cash outflow at year 0
\begin{tabular}{|l|l|r|}
\hline & & \multicolumn{1}{|c|}{\(₹\)} \\
\hline Cost of Machine & & \(1,00,000.00\) \\
\hline Less: Security Deposit & 1000.00 & \\
\hline Management Fee & 1000.00 & \(2,000.00\) \\
\hline Net Cash Outflow & & \(98,000.00\) \\
\hline
\end{tabular}
(ii) Annual Net Cash Inflow
\begin{tabular}{|l|l|l|l|l|l|}
\hline (a) Inflow & & & & & \\
\hline & I & II & III & IV & V \\
\hline Lease Rentals & 35,000 & 35,000 & 35,000 & 35,000 & 35,000 \\
\hline Residual Value of Machine & - & - & - & - & 15,000 \\
\hline & 35,000 & 35,000 & 35,000 & 35,000 & 50,000 \\
\hline (b) Outflow & & & & & \\
\hline Maintenance /Admn. cost & 2,000 & 2,000 & 2,000 & 2,000 & 2,000 \\
\hline Tax (see working below) & 3,600 & 6,413 & 8,522 & 10,104 & 11,290 \\
\hline \begin{tabular}{l} 
C. Net Cash Inflow \\
(A-B)
\end{tabular} & 29,400 & 26,587 & 24,478 & 22,896 & 36,710 \\
\hline
\end{tabular}
\begin{tabular}{|l|c|c|c|c|c|}
\hline \multicolumn{7}{|c|}{ Computation of Annual Tax } \\
\hline \begin{tabular}{c} 
(a) Income \\
Lease Rentals
\end{tabular} & 35,000 & 35,000 & 35,000 & 35,000 & 35,000 \\
\hline (b) Expenditure & & & & & \\
\hline Maintenance \& Admn & 2,000 & 2,000 & 2,000 & 2,000 & 2,000 \\
\hline Depreciation & 25,000 & 18,750 & 14,063 & 10,547 & 7,910 \\
\hline & 27,000 & 20,750 & 16,063 & 12,547 & 9,910 \\
\hline (c) Taxable Income (a-b) & 8,000 & 14,250 & 18,937 & 22,453 & 25,090 \\
\hline (d) Tax @ 45\% & 3,600 & 6,413 & 8,522 & 10,104 & 11,290 \\
\hline Post Tax Profit & 4,400 & 7,837 & 10,415 & 12,349 & 13,800 \\
\hline
\end{tabular}
(iii) Computation of Internal Rate of Return (IRR)
\begin{tabular}{|l|l|l|l|l|l|l|}
\hline Year & \begin{tabular}{l} 
Cash \\
Outflow
\end{tabular} & \begin{tabular}{l} 
Cash \\
Inflow
\end{tabular} & \begin{tabular}{l} 
Discount \\
Factor at 12\%
\end{tabular} & \begin{tabular}{l} 
Present \\
Value
\end{tabular} & \begin{tabular}{l} 
Discount \\
Factor at 14\%
\end{tabular} & \begin{tabular}{l} 
Present \\
Value
\end{tabular} \\
\hline 0 & 98,000 & & & & & \\
\hline 1 & - & 29,400 & 0.8928 & 26,248 & 0.8771 & 25,787 \\
\hline 2 & - & 26,587 & 0.7971 & 21,192 & 0.7694 & 20,456 \\
\hline 3 & - & 24,478 & 0.7117 & 17,421 & 0.6749 & 16,520 \\
\hline 4 & - & 22,896 & 0.6355 & 14,550 & 0.5920 & 13,554 \\
\hline 5 & - & 36,710 & 0.5674 & 20,829 & 0.5193 & 19,063 \\
\hline & & & & 100,240 & & 95,380 \\
\hline NPV & & & & \(+2,240\) & & \(-2,620\) \\
\hline
\end{tabular}
\(\operatorname{IRR}=12+(2240 / 2240+2620) \times 2=12+0.92=12.92 \%\)
(iv) Weighted Average Cost of Capital
\[
\begin{aligned}
K o & =K d(1-t) \frac{D}{D+S}+\frac{S}{D+S} K e \\
& =(18(1-45 / 100) \times 75,000 / 100,000)+(15 \times 25,000 / 100,000) \\
& =7.425+3.75=11.175 \%
\end{aligned}
\]

Since, the tax-adjusted weighted average cost of capital works out to \(11.175 \%\), which is less than the IRR of \(12.92 \%\). The lessor can take up this beneficial lease plan.

\section*{Notes \\ Self Assessment}

Fill in the blanks:
13. The alternative that shows \(\qquad\) NPV is preferred.
14. If this IRR is higher than the \(\qquad\) average cost of capital (of the lessor), the lease plan is accepted.

\subsection*{13.5 Accounting Treatment of Lease Purchase Transactions}

The accounting treatment of lease transactions in the books of lessee and lessor are as follows:
1. Accounting Treatment in the books of lessee: The assets acquired on lease do not appear in the balance sheet of the lessee. In order to give a true and fair view of the financial statements, the lessee should be required to disclose the amount of leased assets and financial obligations as a footnote to the balance sheet. Total lease rentals, however, appear as chargeable expenses in the Profit \& Loss Account.
2. Accounting Treatment in the books of Lessor: In case of lease transactions the following journal entries are passed by the lessor in their books of accounts:
(a) When Asset is leased out
\begin{tabular}{|c|c|c|c|c|}
\hline S. No. & Particulars & L.F. & Dr. & Cr. \\
\hline & \begin{tabular}{l} 
Lease Receivables A/c \\
To Fixed Asset A/c \\
(Fixed asset leased out)
\end{tabular} & Dr. & & \\
\hline
\end{tabular}
(b) When lease rent received
\begin{tabular}{|l|l|l|l|}
\hline \begin{tabular}{l} 
Bank A/c \\
To Lease Rental A/c
\end{tabular} & Dr. & & \\
(Rent received for leased asset)
\end{tabular}

The lessors show in their balance sheets, leased assets at cost less depreciation as fixed assets. Lease rentals earned are taken as income in the Profit \& Loss Account.

The lending banker should ensure that the asset is depreciated within the primary lease period. Even in respect of the companies, which depreciate the leased assets over the primary lease period different depreciation methods, are followed. These methods include:
(a) Equal depreciation over the primary lease period
(b) Depreciation based on lease rentals ratio
(c) Sum of year digit method
(d) ICAI method and its variations

It can be seen that the same leasing transaction reflects difference operational results based on the depreciation policy adopted by the lessor. It makes inter-firm comparison difficult.

The Institute of Chartered Accountants of India (ICAI) has published guidance note for lease accounting in line with International Accounting Standard - IAS 17.

The accounting of finance lease as recommended by ICAI guidelines are as follows:
(a) Calculate the IRR built in the lease rental structure.
(b) Apply the IRR on the principal sum that is outstanding at the beginning of the period. This would be the net income earned during the period.
(c) Net-off from the lease rental receipt the amount received as in (b) above. This would be the principal component built into the lease rental.
(d) Depreciate the asset as required under company law. If the depreciation as per company law is less than the principal recovery calculated as per (c) above then debit the difference to the Profit \& Loss Account as a "Lease Equalisation Account" debit. On the other hand, if the depreciation as per company law is more than the principal recovery calculated as per (c) above, then credit the difference to the P \& L A/c as a "Lease Equalisation Account" credit.
(e) Corresponding to the "Lease Equalisation Account" credit/debit there would be a "Lease Terminal Adjustment" debit/credit shown under the head "current Asset/Liability" in the balance sheet.

The essence of the ICAI guidelines is to bring leases at par with loans and hire purchase finance. This is because the net income recognized as per the guidelines for leases would be lease rentals minus the principal recovery, which in effect is the interest component, built into the lease transaction. Thus, ICAI's guidelines should be followed.
It may be noted that ICAI's guidelines are different from IAS-17 as follows:
(i) ICAI's guidelines aim to show the leased asset as a fixed asset in the balance sheet of a lessor. IAS-17 shows the discounted value of the future lease rentals as an asset. ICAI's logic is to emphasize ownership status and claim depreciation allowance under Section 32 of Income Tax Act.
(ii) Amortization of the principal sum is directly charged to asset under IAS-17 whereas as per ICAI's guidelines it is shown as two items i.e. statutory depreciation and lease equalization credit/debit.

The requirement of charging the principal recovery as statutory depreciation and lease equalization charge has arisen because our Companies Act, 1956 does not look at a leasing transaction in the right perspective. This calls for suitable changes in company law. Thereafter ICAI's guidelines can be amended in line with IAS-17.

\section*{Sale and Leaseback Transactions}

Under this arrangement, a firm sells an asset to a leasing company, which in turn leases the asset back to the firm. The asset is generally sold at market price. The firm receives the sale price in cash. Through this transaction, the firm unlocks its investment in the existing asset by its sale, improves its liquidity, but still retains the right to possess and use the asset during the basic lease period.

This arrangement is beneficial to both the lessor and lessee. The lessor gets periodic lease rentals and gets the benefit of tax credits due to depreciation. The lessor, as the legal owner of the asset, is also entitled to any residual value the asset might have at the end of the lease period. Besides, retaining the use of the asset the lessee gets immediate cash, which improves his cash flow position. It also improves ratio of return on investment and increases the borrowing power of the unit. Where the asset has been fully depreciated, the seller (lessee) is also in a position to improve the bottom line. For this purpose the block concept of depreciation under Income Tax

Notes Act has come very handy to these sellers (lessees). The RBI has, however, not permitted banks to finance sale and leaseback transaction.

The sale and leaseback arrangement can be an operating lease or financial lease, depending upon the intentions of the parties in the agreement. It is widely prevalent in the retail market in Western countries. Companies facing short-term liquidity problem also favour it.

\section*{Self Assessment}

State whether the following statements are true or false:
15. The assets acquired on lease appear in the balance sheet of the lessee.
16. Lease rentals earned are taken as income in the Profit \& Loss Account in lessor's books of accounts.
17. Under sale and leaseback arrangement, a firm sells an asset to a leasing company, which in turn leases the asset back to the firm.

\subsection*{13.6 Summary}
- Leasing is a contractual transaction in which the owner of an asset (called lessor) gives the same to another party (called lessee) the right to use it for a specified period of time (called lease period) in consideration of certain payments (called lease rentals).
- In operating lease, the lease is usually for a shorter term and is generally cancellable.
- Financial lease is a long-term lease usually coinciding with the economic life of the asset and is non-cancellable.
- The cash inflows by way of lease rentals may be discounted at appropriate post-tax rate of return.
- The key methods of lease evaluation are Net Present Value (NPV) or Internal Rate of Return (IRR) method.
- Under NPV method, the present value of cash flows associated with the buying and leasing alternatives are independently ascertained and compared.
- In the IRR analysis, the lessee's evaluation is based on cash flows associated with various options.
- \(\quad\) The assets acquired on lease do not appear in the balance sheet of the lessee.
- The lessors show in their balance sheets, leased assets at cost less depreciation as fixed assets. Lease rentals earned are taken as income in the Profit \& Loss Account.
- Under sale and leaseback arrangement, a firm sells an asset to a leasing company, which in turn leases the asset back to the firm.

\subsection*{13.7 Keywords}

Finance Lease: A lease that transfers substantially the entire risks and rewards incident to ownership of an asset.

Gross Investment in the Lease: Aggregate of minimum lease payments under a finance lease plus any unguaranteed residual value accruing to the lessor.

Minimum Lease Payments: Payments over the lease term that the lessee makes to the lessor (other than contingent rent, cost of services and taxes) including guaranteed residual value of the leased asset or promised purchase price at the expiry of the lease period.

Net Investment in the Lease: Gross investment in the lease less unearned finance income.
Operating Lease: A lease other than the finance lease.
Unearned Finance Income: It is the sum of finance charges over the lease period.

\subsection*{13.8 Review Questions}
1. Define leasing. How does it differ from hire purchase?
2. Briefly discuss the various aspects of appraisal considered by a banker while financing to a leasing and hire purchase company.
3. Finance lease operates as a long-term debt financing and is usually full-payout as in contrast to operating lease. Identify the other differences between the operating lease and finance lease.
4. A finance company leases out machinery costing ₹ \(50,00,000\). The finance company has asked for a \(20 \%\) down payment and the balance in twenty equal quarterly installments. Each installment is payable at the end of every quarter. The lessor requires a pre-tax return of \(16 \%\) per annum from the deal. How much should be the quarterly lease rental? What is the total amount of interest earned by the lessor from the deal?
5. Distinguish between a lease and hire purchase transactions.
6. Illustrate the accounting treatment of lease transactions in the books of lessor and lessee.
7. DLF Ltd. is engaged in the business of leasing and hire purchase. The company also functions as a merchant banker equity researcher, corporate financier, portfolio manager, etc. The company provides fund based as well as non-fund based financial solutions to both wholesale and retail segments.

DLF Ltd. has been approached by A Ltd., Mumbai, for financial help. A Ltd. manufacturers process system for food processing, pharmaceuticals, engineering, dairy and chemical industries. A wide range of centrifugal separators, plate, spray drudgers, custom fabricated equipment for exotic metals, refrigeration compressors, are also manufactured by the company. One of the major strengths of the company is project management.

A Ltd. has a well-equipped \(R \& D\) centre. It has pilot plant facilities and a modern laboratory for chemical, metallurgical and mechanical analyser. The company has also set up a technology centre with advanced testing facilities. Recently, the manager of the technology centre has requisitioned for the acquisition of computerised sophisticated equipment for conducting important tests.
The equipment is likely to have the useful life of three years. The cost of the equipment is \(₹ 10\) crore. The scrap value of the equipment at the end of its useful life will be zero for the company. The finance manager of A Ltd. has suggested that the company should take a loan for three years from a commercial bank. Repayment of the loan would be made at the end of each year in three equal installments. The repayments would comprise of the (i) principal, and (ii) interest at \(10 \%\) p.a. (on the outstanding amount in the beginning of the year). A Ltd. uses a cost of capital of \(15 \%\) to evaluate the investments of this type. The equipment will be depreciated @ \(33.3 \%\) p.a. (WDV).
P. Securities Ltd. has agreed to give the equipment to the company on a three-year lease. The annual rental for the lease, payable in the beginning of each year, would be ₹ 4 crore.

Notes P. Securities Ltd. discounts its cash flows @ 14\%. The equipment is depreciable at \(33.3 \%\) p.a. (straight line method). The lessee may exercise its option to purchase the equipment for \(₹ 4\) crore at the termination of the lease.

A Ltd. would bear all maintenance, insurance and other charges in both the alternatives. Both the companies pay tax @ \(35 \%\).

You are a practicing Company Secretary. You are approached by the Managing Director of A Ltd. to help the company in evaluating the proposal.
Prepare a report for the Managing Director of A Ltd. showing the effect of the lease alternative on the wealth of its shareholders. Support your answer with appropriate calculations.
8. Discuss the lease evaluation from both the lessor and lessee perspective.
9. The Institute of Chartered Accountants of India (ICAI) has published guidance note for lease accounting in line with International Accounting Standard - IAS 17. What are those guidelines?
10. Illustrate the key methods of lease evaluation.

\section*{Answers: Self Assessment}
\begin{tabular}{llll} 
1. & cancellable & 2. & Service lease \\
3. & long-term & 4. & finance leasing \\
5. & operating & 6. & False \\
7. & True & 8. & True \\
9. & False & 10. & present value \\
11. & rental & 12. & post-tax rate of return \\
13. & higher & 14. & weighted after-tax \\
15. & False & 16. & True \\
17. & True & &
\end{tabular}

\subsection*{13.9 Further Readings}
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www.futureaccountant.com

\section*{Unit 14: Insurance Claim}
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Objectives
Introduction
14.1 Loss of Stock Policy
14.1.1 Computation of the Value of Stock on the Date of Fire
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\section*{Objectives}

After studying this unit, you will be able to:
- Prepare loss of stock policy
- Illustrate insolvency accounts

\section*{Introduction}

A business may suffer abnormal losses due to different reasons such as fire, theft, strike, etc. Among all the most common is loss by fire. When a fire takes place the business naturally incurs heavy losses and in turn the normal business operation disrupted. To cover the loss from such events a business may take on an insurance policy. Insurance being a contract of indemnity, the claim for loss is restricted to the actual loss of assets.

\subsection*{14.1 Loss of Stock Policy}

A business takes fire insurance policy to cover the loss of assets including stocks and loss of profit (consequential loss). In case of loss of a fixed asset, the computation of loss is simple. The value of the assets can be ascertained form the books of accounts. When stock is destroyed by fire, the computation of loss is not simple because the prices of stock are changing according to the varying rates.

\section*{Consequential Loss Policy}

This policy is suitable for business establishments and corporates for whom business interruption would mean heavy monetary loss in view of huge fixed costs.

Fire consequential loss policy provides cover for:
- Expenses and increased cost of working as a result of business interruption following a loss covered by the fire policy.
- This cover can be taken for the maximum period of the anticipated interruption in the event of loss. In addition, the supplier's and the customer's premises on which the business is dependent, cost of auditors fee (required to submit the monetary claim) can also be insured.
- It covers reduction in gross profit due to a reduction in turnover followed by interruption of business.
- The additional expenditure necessarily incurred for avoiding or reducing the fall in turnover during the interruption period is covered under this policy.
- Also, there are overhead expenses of running the business such as salaries, wages, taxes, interest, etc. which continue to be incurred in spite of the interruption of the production.

The following are the key methods to compute the claim for loss of stock:
- Computation of the value of stock on the date of fire.
- Computation of actual amount of claim.

\subsection*{14.1.1 Computation of the Value of Stock on the Date of Fire}

Sometimes it is not possible to compute the value of stock destroyed by fire form the stock register. In such case the value of stock on the date of fire can be ascertained by constructing a Memorandum Trading A/c up to the date of fire.

The given below is the proforma of Memorandum Trading A/c:

\section*{Memorandum Trading Account (up to the date of fire)}
\begin{tabular}{|l|l|l|l|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Opening Stock & & By Sales & \\
To Purchases & & Less: Return Inwards & \\
Less: Return Outward & & By Closing Stock (Balance) & \\
To Direct Expenses A/c & & & \\
To carriage Inward A/c & & & \\
To Wages A/c & & & \\
To Gross Profit (\% of sale) & & & \\
\cline { 2 - 3 } & & & \\
\hline
\end{tabular}

\subsection*{14.1.2 Computation of Actual Amount of Claim}

The Memorandum of Trading A/c shows the value of stock which is supposed to exit at the time of fire. In order to compute the actual amount of claim to be lodged, the value of salvaged stock should be deducted from the estimated value of the closing stock. The actual amount of claim to be lodged is as follows:
\begin{tabular}{ll} 
& \(₹\) \\
Book value of stock (Balance as per Memorandum Trading A/c) & --- \\
less: Salvaged & \(\underline{---}\) \\
Loss of stock & \(\underline{---}\)
\end{tabular}

Example: On 12th June, 2010 fire occurred in the premises Mr. X. Most of the stocks were destroyed, cost of stock salvaged being ₹ 11,200 . From the books of account, the following particulars were available:
(i) His stock at the close of account on December 31 \({ }^{\text {st, }} 2009\) was valued at ₹ 83,500.
(ii) His purchases from 1-1-2010 to 12-6-2010 amounted to ₹ 1,12,000 and his sales during that period amounted to ₹ \(1,54,000\).

On the basis of his accounts for the past three years it appears that he earns on an average a gross profit of \(30 \%\) of sales.
Compute the amount of the claim.

\section*{Solution:}

Books of Mr. X
Memorandum Trading Account for the period 1-1-2010 to 12-6-2010
\begin{tabular}{|l|r|l|r|}
\hline Particulars & \(₹\) & Particulars & \(₹\) \\
\hline To Opening Stock & 83,500 & By Sales & \(1,54,000\) \\
To Purchases & \(1,12,000\) & By Closing Stock (Balance) & 87,700 \\
To Gross Profit (30 \% of sale) & & & \\
\cline { 2 - 2 } & 46,200 & & \(\mathbf{2 , 4 1 , 7 0 0}\) \\
\hline
\end{tabular}

Amount of claim for the loss of stock as on 12-6-2010

\section*{₹}

Book value of stock
87,700
Less: salvaged
11,200
Claim to be lodged
76,500

\section*{Self Assessment}

Fill in the blanks:
1. The value of the assets can be ascertained form the
2. Sometimes it is not possible to compute the value of stock destroyed by fire form the

Notes 3. In order to compute the actual amount of claim to be lodged, the value of salvaged stock should be deducted from the \(\qquad\) of the closing stock.
4. The value of stock on the date of fire can be ascertained by constructing a \(\qquad\) up to the date of fire.
5. When stock is destroyed by fire, the computation of loss is not simple because the prices of stock are changing according to the \(\qquad\)

\subsection*{14.2 Average Clause}

The amount of insurance premium is paid at regular intervals depends on the value of stock insured. More the value of stock insured more is the amount of premium to be paid. In order to reduce the burden of insurance premium the average stock of a business may no be adequately insured with the assumption that fire may not destroy the whole stock.


Did u know? What is under-insurance?
When the value of an insurance policy taken by a business is less than the value of average stock lying in the godown is known as under-insurance.

Generally the insurance policies contain an average clause to discourage under-insurance. In case of partial loss of stock, the amount of claim for loss of stock is proportionately reduced, considering the ratio of policy amount to the value of stock as on the date of fire. The amount of Net Claim is calculated as:
\[
\text { Net Claim }=\text { Loss of Stock } \times \frac{\text { Sum Insured }}{\text { Insurable Amount (Total Cost) }}
\]

\section*{三汇 \\ Example: Continuing with the above example, compute the value of claim by considering the following additional information:}
(i) Some stock was salvaged in the damaged condition and its value in that condition was agreed at ₹ 10,500
(ii) Mr. X has insured his stock for ₹ 60,000 .

\section*{Solution:}
1. Computation of value of claim to be lodged for the loss of stock as on 12-6-2010

Book value of stock
87,700
Less: salvaged
11,200
Agreed value of damaged stock
10,500
21,700
Claim to be lodged
66,000
2. Amount of Claim

The formula to compute the amount of claim is:
\[
\text { NetClaim }=\text { Loss of Stock } \times \frac{\text { Sum Insured }}{\text { Insurable Amount(Total Cost) }}
\]
\[
\text { Amount of Claim }=\frac{₹ 60,000}{₹ 87,700} \times ₹ 66,000=₹ 45,154
\]

\section*{Self Assessment}

Fill in the blanks:
6. The amount of insurance premium is paid at regular intervals depends on the value of
\(\qquad\)
7. When the value of an insurance policy taken by a business is less than the value of \(\qquad\) lying in the godown is known as under-insurance.
8. In order to reduce the burden of \(\qquad\) . the average stock of a business may no be adequately insured with the assumption that fire may not destroy the whole stock.
9. Generally the insurance policies contain an average clause to discourage \(\qquad\)
10. Net claim \(=\) \(\qquad\) .* Sum assured/Insurable amount.

\subsection*{14.3 Loss of Profit Policy}

In case of a fire the business has to incur some consequential losses apart from the direct loss on account of stock and other assets destroyed. The consequential losses occurred because for some time the business is disorganised or has to discontinued and during that period the fixed expenses of the business like salaries, rent, etc., continue. Moreover there is the loss of profit which the business would have earned during that period. This types of losses can be insured against the "Loss of Profit" policy. This type of policy covers the following items:
- Loss of net profit
- Standing charges
- Any increased cost of working.

To measure the loss suffered by the firm due to fire it is necessary to set up some standards expressed in such units to represent the volume of work. There should be a direct relation between the amount of standard and the amount of profit raised. The most satisfactory unit of measuring the prosperity is usually the turnover.

The following are the essential conditions for establishing a claim for loss of profit:
- the insured's premises or the property are destroyed or damaged by the peril defined in the policy,
- the insured's business carried on the premises is interrupted or interfered with as a result of such damages.

\section*{Conditions included in a Loss of Profit Insurance Policy}

Insurance policies covering loss of profit contain the following conditions usually:
Rate of Gross Profit: The rate of Gross Profit earned on turnover during the financial year immediately before the date of damage.

Annual Turnover: The turnover during the twelve months immediately before the damage.
Standard Turnover: The turnover during that period in the twelve months immediately before the date of damage which corresponds with the Indemnity Period.

Notes To which such adjustment shall be made as may be necessary to provide for the trend of the business and for variations in or special circumstances affecting the business either before or after the damage or which would have affected the business had the damage not occurred, so that the figures thus adjusted shall represent, as nearly as may be reasonably practicable the results which but for the damage would have been obtained during the relative period after damage.

Indemnity Period: The period beginning with the occurrence of the damage and ending not later than twelve months thereafter during which the results of the business shall be affected in consequences of the damage.

Memo 1: If during the indemnity period goods shall be sold or services shall be rendered elsewhere than at the premises for the benefit of the business either by the insured or by others on the insured's behalf, the money paid or payable in respect of such sales or services shall be brought into account in arriving at the turnover during the indemnity period.

Memo 2: If any standing charges of the business be not insured by this policy then in computing the amount recoverable hereunder as increase in cost of workings that proportion only of the additional expenditure shall be brought into account which the sum of the Net Profit and the insured Standing Charges bear to the sum of the Net Profit and all standing charges.

Memo 3: This insurance does not cover loss occasioned by or happening through or in consequence of destruction of or damage to a dynamo motor, transformer, rectifier or any part of an electrical installation resulting from electric currents however arising.

The amount payable as indemnity is the sum of (a) and (b) below:
(a) In respect of reduction in turnover: The sum produced by applying the rate of gross profit to the amount by which the turnover during the indemnity period shall, in consequence of the damage, falls short of the standard turnover.
(b) In respect of increase in cost of working: The additional expenditure [subject to the provisions of Memo (2) given above] necessarily and reasonably incurred for the sole purpose of avoiding or diminishing the reduction in turnover which, but for that expenditure, would have taken place during the indemnity period in consequence of the damage: the amount allowable under this provision cannot exceed the sum produced by applying the rate of gross profit to the amount of reduction avoided by the additional expenditure.

The amount payable arrived at as above is reduced by any sum saved during the indemnity period in respect of such of the insured standard charges as may cease or be reduced in consequence of the damage.

Insurance policies provide that if the sum insured in respect of loss of profit is less than the sum produced by applying the rate of gross profit to the annual turnover (as adjusted by the trend of the business or variation in special circumstances affecting the business either before or after the damage or which would have affected the business had the damage not occurred), the amount payable by the insurer shall be proportionately reduced. This is nothing but application of the average clause.

The turnover of a business rarely remains constant and where there has been an upward or downward trend since the date of the last accounts and up to the date of the fire, the "standard turnover" should be appropriately adjusted, as per definition given above.

Example: From the following information, calculate the claim made on a 'loss of profit' policy.
(i) Indemnity period 13 months
(ii) Sum insured ₹ \(2,00,000\)
(iii) Turnover, last financial year ended Dec. 31, 2010 ₹ \(12,00,000\).
(iv) Gross Profit i.e., Net profit plus insured standing charges, ₹ 2,00,000 giving a gross profit rate of \(20 \%\).
(v) Net profit plus all standing charges, ₹ \(2,50,000\) i.e., 50,000 of the standing charges are not insured.
(vi) Fire occurs on 31st March 2011, and affects business for 6 months.
(vii) Turnover for 12 months ended 31st March, 2011, ₹ \(11,70,000\).
(viii) Turnover: 1-4-2000 to 30-9-2010 5,00,000

1-4-2011 to 30-9-2011 3,00,000
Reduction in turnover 2,00,000
(ix) Increase in cost of working, ₹ 30,000 otherwise of which turnover during 1-4-2011 to 30-9-2011 would reduce hereinafter by ₹ \(1,60,000\).
(x) Saving in insured charges in the indemnity period ₹ 10,000 .

The claim in respect of profit will be calculated as follows:
\begin{tabular}{lr} 
(a) Short Sales: & \(5,00,000\) \\
Reduction in Turnover 1-4-2010 to 30-9-2010 & \(3,00,000\) \\
& \(2,00,000\) \\
Down-trend: & \\
Quarterly sales in 2010 \(\left[\frac{₹ 12,00,000}{12} \times 3\right]\) & \(3,00,000\) \\
& \\
Sales of first quarter in 2011: ₹ \(11,70,000-\left[\frac{₹ 12,00,000}{12} \times 9\right]\) & \(2,70,000\) \\
Adjusted Annual Turnover: & \\
Sales for the period 1-4-2010 to 31-12-2010 \((11,70,000-2,70,000)\) & \(2,00,000\) \\
Add: Sales from 1-1-2011 to 31-3-2011 & \(11,70,000\) \\
& 40,000 \\
Gross Claim: Gross Profit @ 20\% on (a) & 24,718 \\
Add: Claim for increase in cost of working & 64,718 \\
& 10,000 \\
Less: Saving in insured standing charges & 54,718
\end{tabular}

54,718

Notes Claim for increased cost of working is subject to two tests
(i) Increased cost of working \(\times \frac{\text { G.P. on Annual Turnover }}{\text { G.P. as above }+ \text { Uninsured Standing Charges }}\)
\(=₹ 30,000 \times \frac{₹ 11,70,000 \times \frac{20}{100}}{₹ 11,70,000 \times \frac{20}{100}+₹ 50,000}=₹ 24,718\).
(ii) Gross Profit on sales generated by increased cost of workings
\(=₹ 1,60,000 \times \frac{20}{100}=₹ 32,000\)
Lower of the two, i.e., ₹ 24,718 is allowable
(c) Application of average clause:

Gross Profit of annual turnover, \(20 \%\) on ₹ \(11,70,000\)
Sum insured
Hence claim limited to \(54,718 \times \frac{₹ 2,00,000}{₹ 2,34,000}\)


Discuss the key provisions for preparing the statement of affairs under Insolvency Act in India.

\section*{Self Assessment}

Fill in the blanks:
11. To measure the loss suffered by the firm due to fire it is necessary to set up some standards expressed in such units to represent the \(\qquad\)
12. There should be a direct relation between the amount of standard and the amount of
\(\qquad\) raised.
13. The most satisfactory unit of measuring the prosperity is usually the \(\qquad\)

\subsection*{14.4 Summary}
- A business may suffer abnormal losses due to different reasons such as fire, theft, strike, etc.
- Among all the most common is loss by fire.
- When a fire takes place the business naturally incurs heavy losses and in turn the normal business operation disrupted.
- A business takes fire insurance policy to cover the loss of assets including stocks and loss of profit (consequential loss).
- Sometimes it is not possible to compute the value of stock destroyed by fire form the stock register.
- In such case the value of stock on the date of fire can be ascertained by constructing a Memorandum Trading A/c up to the date of fire.
- The Memorandum of Trading A/c shows the value of stock which is supposed to exit at the time of fire.
- In order to compute the actual amount of claim to be lodged, the value of salvaged stock should be deducted from the estimated value of the closing stock.
- The amount of insurance premium is paid at regular intervals depends on the value of stock insured.
- In case of partial loss of stock, the amount of claim for loss of stock is proportionately reduced, considering the ratio of policy amount to the value of stock as on the date of fire.

\subsection*{14.5 Keywords}

Annual Turnover: The turnover during the twelve months immediately before the damage.
Indemnity Period: The period beginning with the occurrence of damage and ending not later than the twelve months thereafter during which the results of the business shall be affected in consequence of the damages.

Standard Turnover: The turnover during that period in twelve months immediately before the date of damage which corresponds with the indemnity period.

Under-insurance: When the value of an insurance policy taken by a business is less than the value of average stock lying in the godown is known as under-insurance.

\subsection*{14.6 Review Questions}
1. Illustrate the key methods to compute the claim for loss of stock.
2. Prepare the proforma of Memorandum trading \(\mathrm{A} / \mathrm{c}\).
3. Generally the insurance policies contain an average clause to discourage under-insurance. Discuss.
4. On \(1^{\text {st }}\) Oct 2004 fire occurred in the premises Mr. Ram. Most of the stocks were destroyed, cost of stock salvaged being ₹ 15,000 . From the books of account, the following particulars were available.
(i) His stock at the close of account on December 31 \({ }^{\text {st }}, 2009\) was valued at ₹ 90,500 .
(ii) His purchases from 1-1-2004 to 1-10-2004 amounted to ₹ 120,000 and his sales during that period amounted to ₹ \(1,70,000\).

On the basis of his accounts for the past three years it appears that he earns on an average a gross profit of \(25 \%\) of sales.
Compute the amount of the claim.
5. Why there is need for loss of profit policy in the business?
6. Identify the key conditions included in loss of profit insurance poicy.
7. Why loss of profit is limited to loss of gross profit?

\section*{Notes Answers: Self Assessment}
1. Books of accounts
2. Stock register
3. Estimated value
4. Memorandum Trading A/c
5. Varying rates
6. Stock insured
7. Average stock
8. Insurance premium
9. Under-insurance
10. Loss of stock
11. volume of work
12. profit
13. turnover

\subsection*{14.7 Further Readings}

\author{
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