ACCOUNTING FOR PARTNERSHIP

BASIC CONCEPTS

LEARNING OBJECTIVES

After studying this chapter you will be able to :

- Define partnership and list its essential features;
- Explain the meaning and list the contents of partnership deed;
- Recognise the relevant provisions of the Indian Partnership Act 1932, as applicable to accounting in the absence of any provision to the contrary in the partnership agreement;
- Prepare partners' capital account under fixed and fluctuating capital method;
- Distribute profit or loss among the partners and prepare profit and loss appropriation account;
- Explain how guarantee of a minimum amount of profit to a partner is treated in the books of accounts;
- Carry out past adjustments;
- Explain the meaning of goodwill and methods of its evaluation;
- Describe the accounting implications of change in profit sharing ratio; and
- Explain 'joint life policy' in relation to partnership accounts.

A business can be organised in the form of a sole proprietorship, a partnership firm or a company. Earlier, you have studied how to prepare Profit and Loss Account and Balance Sheet of a sole proprietor. If one man was intelligent enough and commanded all the resources that he needed and also the necessary power to do everything, he would have carried on his business as an individual. Alas, this is not true in life. Every man needs help from others and this is true in business which requires huge resources for the ongoing expansion programmes. Therefore, one of the inevitable ways is to form partnership by joining hands with person(s) who can complement the efforts by bringing in the necessary intellectual as well as financial capital. This chapter is devoted to the basic aspects of partnership accounting dealing with the preparation of Profit and Loss Account and Balance Sheet of a partnership firm. Although the basic accounting procedure is similar in all cases, there are certain special features in the accounts of a partnership firm. In the case of a partnership firm, for example, the special features relate to the distribution of profits, the maintenance of capital accounts and the adjustments required when the firm is reconstituted. In this chapter, we shall study the nature of partnership and discuss the basic aspects of partnership accounts like preparation of capital accounts, distribution of profits amongst partners and change in the profit-sharing ratio of the existing partners along with preparation of Profit and Loss Account and Balance Sheet of the partnership firm.

1.1 Nature of Partnership

The sole proprietorship has its limitations such as limited capital, limited managerial ability and limited risk-bearing capacity. Hence, when a business expands or when it is to be set up on a scale, which needs more capital and involves more risk, two or more persons join hands to run it. They agree to share the capital, the management, the risk and profits of the business. Such mutual economic relationship based on a written or an oral agreement amongst these persons is termed as 'partnership'. The persons who have entered into partnership are individually known as 'partners' and collectively as 'firm'.

The Indian Partnership Act, 1932 defines partnership as "the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all". Based on this definition, the essential features of partnership are as follows:

1. *Two or more persons :* To form a partnership, there must be at least two persons. There is, however, a limit on the maximum number of persons who constitute a partnership firm. It should not exceed 10 if the firm is carrying on a banking business and 20 if it is engaged in any other business.
2. *Agreement between the partners :* A partnership is created by an agreement. It is neither created by operation of law as in the case of Hindu Undivided Family nor by status. The agreement forms the basis of economic relationship amongst the partners. The agreement can be written or oral.
3. *Business :* The agreement should be for carrying on some legal business. A joint ownership of some property by itself does not constitute partnership. However, the joint ownership of the property may be used for forming the partnership in order to pursue the business objectives for which the partnership is formed.

4. *Sharing of profits :* The agreement should be to share the profits of the business. If some persons join hands to carry on some charitable activity, it will not be termed as partnership. Of course, the ratio in which the partners will share the profits is determined by the agreement or in the absence of the agreement; it is shared equally amongst the partners.
5. *Business carried on by all or any of them acting for all :* The firm's business may be carried on by all the partners or any one of them acting for all. This means that partnership is based on the concept of mutual agency relationship. A partner is both an agent (he can, by his acts, bind the other partners) and a principal (he is bound by the acts of other partners). The implication of this is that partner binds others and others bind him in the same way. Further implication of this is that each partner is entitled to participate in the conduct of business affairs and act for and on behalf of the firm.

1.2 Partnership Deed

1.2.1 Meaning

A partnership is formed by an agreement. This agreement may be written or oral. Though the law does not expressly require that there should be an agreement in writing but the absence of a written agreement may be a source of trouble in managing the affairs of the partnership firm. Therefore, a partnership deed should be written, assented and signed by all the partners.

1.2.2 Contents of Partnership Deed

The partnership deed usually contains the following particulars:

- Name of the firm;
- Names and addresses of all partners;
- Nature and place of the business;
- Date of commencement of partnership;
- Duration of partnership, if any;
- Amount of capital contributed or to be contributed by each partner;
- Rules regarding operation of bank accounts;
- Ratio in which profits are to be shared;
- Interest, if any, on partners' capital and drawings;

- Interest on loan by the partners(s) to the firm;
- Salaries, commissions, etc. if payable to any partner(s);
- The safe custody of the books of accounts and other documents of the firm;
- Mode of auditor's appointment, if any;
- Rules to be followed in case of admission, retirement, death, of a partner;
- Settlement of accounts on dissolution of the firm; and
- Mode of settlement of disputes among the partners.

1.2.3 Provisions Affecting Accounting Treatment

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 Loan :* 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 per cent 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. Implying, thereby, that it is a charge against the revenues.
4. *Interest on Drawings :* No interest will be charged on drawings made by the partners.
5. *Remuneration to Partners :* No partner is entitled to any salary or commission for participating in the business of the firm.

It should be remembered that the above rules are applicable only in the absence of any provision to the contrary in the partnership agreement.

1.3 Special Aspects of Partnership Accounts

Following are the specific issues that require special attention in case of partnership accounts:

- Maintenance of capital accounts of partners;
- Ascertainment and allocation of profit and losses ;
- Adjustment for wrong allocation of profits and losses ;
- Allocation of profits involving minimum guaranteed profit to a partner;
- Reconstitution of the partnership firm; and
- Dissolution of the firm.

The first four aspects are discussed in this chapter and the last two are dealt with in the following chapters.

1.3.1 Partners' Capital Accounts

In case of partnership firm, the transactions relating to partners are recorded in their respective capital accounts. Normally, each partner's capital account is prepared separately. But these accounts can also be shown in a tabular form as shown later in this chapter.

There are two methods by which the capital accounts of partners can be maintained. These are:

- Fluctuating Capital Method; and
- Fixed Capital Method.

1.3.1.1 Fluctuating Capital Method

Under the fluctuating capital method, only one account *viz.*, the capital account for each partner, is maintained. It records all items affecting partner's account like interest on capital, drawings, interest on drawings, salary, commission, and share of profit or loss in the capital account itself. As a result of these, the balance in the capital account keeps on fluctuating.

The items that usually appear on the debit and the credit side of the Partners' capital account are :

- **Credit Side**
  1. Capital introduced or the opening balance;
  2. Additions to capital made during the year, if any;

3. Interest on capital, if any;
4. Salary to the partners, if any;
5. Commission and bonus to the partners;
6. Share of profit.

- **Debit Side**
  1. Drawings made during the year, if any;
  2. Interest on drawings, if any;
  3. Share of loss, if any;
  4. Withdrawal of capital, if any;
  5. Closing Balance.

Thus, the capital account of a partner will appear as follows:

Partners' Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		* * *		Opening balance		* * *
	Interest on drawings		* * *		Addition to capital		* * *
					Interest on capital		* * *
	Share of loss		* * *		Salary		* * *
	Withdrawal of capital		* * *		Commission/Bonus		* * *
					Share of profit		* * *
	Closing balance		* * *				
	Total		* * *		**Total**		* * *

Format under fluctuating method

Note : *A Partners' Capital Account usually shows a credit balance. It can, however, show a debit balance under certain circumstances, such as over withdrawal or insolvency of the partner.*

1.3.1.2 Fixed Capital Method

Under the fixed capital method, the capitals of the partners shall remain fixed unless some additional capital is introduced or some amount of capital is withdrawn by an agreement among the partners. Hence, all items like interest on capital, drawings, interest on drawings, salary, commission, and share of profit or loss are not to be shown in the capital accounts. For all these transactions, a separate account called 'Partner's Current Account' is opened. Thus, under fixed capital method, two accounts are maintained for each partner *viz.*, (i) Capital Account, and (ii) Current Account. It may be noted that the capital account will continue to show the same balance from year to year unless some amount of capital is introduced or withdrawn, while the balance of current account will fluctuate from year to year.

Under the fixed capital account method, the capital account and the current account would appear as shown below:

Partners' Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Withdrawal of capital Closing balance		* * * * * * * *		Opening balance Addition to capital		* * * * * * * *
	Total		* * * *		**Total**		* * * *

Format under fixed capital method

Partners' Current

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Opening balance* Drawings Interest on drawings Share of loss Closing balance*		* *		Opening balance* Interest on capital Salary Commission/Bonus Share of profit Closing balance*		* *
	Total		* * * *		**Total**		* * * *

Format of Current Account

* *In Partners' Current Account, opening balance and closing balance may appear on either side, i.e. debit or credit.*

Illustration 1 (Fixed and Fluctuating Capital Account)

Amit and Sumit commenced business as partners on April 1, 2000. Amit contributed Rs. 40,000 and Sumit Rs. 25,000 as their share of capital. The partners decided to share their profits in the ratio of 2:1. Amit was entitled to a salary of Rs. 6,000 p.a. Interest on capital was to be provided @ 6% p.a. The drawings of Amit and Sumit for the year ending March 31, 2001were Rs. 4,000 and Rs. 8,000, respectively. The profits of the firm after providing Amit's salary and interest on capital were Rs. 12,000.

Draw up the Capital Accounts of the partners:

(i) When capitals are fluctuating, and

(ii) When capitals are fixed.

Solution

(i) When capitals are fluctuating

Books of Amit and Sumit
Amit's Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		4,000		Cash		40,000
	Balance c/f		52,400		Salary		6,000
					Interest on Capital		2,400
					Profit and Loss Appropriation A/c. (Share of profit 2/3 of Rs. 12,000)		8,000
	Total		**56,400**		**Total**		**56,400**

Sumit's Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		8,000		Cash		25,000
	Balance c/f		22,500		Interest on Capital		1,500
					Profit and Loss Appropriation A/c (Share of profit 1/3 of Rs.12,000)		4,000
	Total		**30,500**		**Total**		**30,500**

(ii) When capitals are fixed.

Books of Amit and Sumit
Amit's Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Balance c/f		40,000		Cash		40,000
	Total		**40,000**		**Total**		**40,000**

Amit's Current Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings Balance c/f		4,000 12,400		Salary Interest on Capital Profit and Loss Appropriation (Share of profit 2/3 of Rs. 12,000)		6,000 2,400 8,000
	Total		**16,400**		**Total**		**16,400**

Sumit's Capital Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Balance c/f		25,000		Cash		25,000

Sumit's Current Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		8,000		Interest on Capital Profit and Loss Appropriation (Share of profit 1/3 of Rs. 12,000) Balance c/f		1,500 4,000 2,500
	Total		**8,000**		**Total**		**8,000**

1.3.2 Distribution of Profit

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

1.3.2.1 Profit and Loss Appropriation Account

As stated above, 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

   (i) For Crediting Interest on Capital to Capital/Current Account :

   Interest on Capital a/c Dr.
   Partners' Capital/Current a/c

   (ii) For transferring Interest on Capital to Profit and Loss Appropriation Account:

   Profit and Loss Appropriation a/c Dr.
   Interest on Capital a/c

2. For Interest on Drawings

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

   Partners Capital/Current a/c Dr.
   Interest on Drawings a/c

   (ii) For transferring Interest on Drawings to Profit and Loss Appropriation Account, the following entry is to be recorded:

   Interest on Drawings a/c Dr.
   Profit and Loss Appropriation a/c

3. Partner's Salary

   (i) 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.
   Partner Capital/Current a/c

   (ii) For charging salary allowed to a partner:

   Profit and Loss Appropriation a/c Dr.
   Salary to partner a/c

4. Partner's Commission

   (i) Commission is an expense for the firm and a gain to the partner. For this, following entry is made:

   Commission to partner a/c Dr.
   Partner's capital/current a/c

   (ii) Commission paid to a partner is charged to Profit and Loss Appropriation account by recording the following entry:

   Profit and Loss Appropriation a/c Dr.
   Commission to partners a/c

5. For Transfer to Reserve:

   Profit and Loss Appropriation a/c Dr.
   Reserve

6. For share of Profit or Loss on Appropriation

   If Profit:

   Profit and Loss Appropriation a/c Dr.
   Partner's Capital/Current a/c

   If Loss:

   Partner's Capital/Current a/c Dr.
   Profit and Loss Appropriation a/c

The Profit and Loss Appropriation Account will appear as follows:

Profit and Loss Appropriation Account

Dr. **Cr.**

Date	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Net Loss as per Profit and Loss A/c (if loss)		* *		Net profit as per Profit and Loss A/c (if profit)		.....
	Interest on Capital A ×× B ××		* *		Interest on drawings A ×× B ××		×××
	Partner's Salary		......		Capital A/cs Share of loss (if loss) A ×× B ××		×××
	Partner's Commission		......				
	Reserve (transfer)		......				
	Capital A/cs - Share of profit (if profit) A ×× B ××		...... * * *				
	Total		....		**Total**		....

Proforma of Profit and Loss Appropriation Account

Illustration 2 (Preparation of Profit and Loss Account and Balance Sheet)

Aakriti and Akash are partners sharing profits in the proportion of 3:2. The undermentioned trial balance was extracted from their books on December 31, 2000.

Trial Balance as on December 31, 2000

	Rs.	*Rs.*
Aakriti's Capital		65,000
Akash's Capital		40,000
Aakriti's Drawings	4,000	
Akash's Drawings	3,000	
Goodwill	10,000	
Plant and Machinery	40,000	
Office Furniture	5,000	
Purchases	85,000	
Sales		1,60,000
Total c/f	1,47,000	2,65,000

Total b/f	1,47,000	2,65,000
Sundry Debtors	40,500	
Sundry Creditors		14,510
Returns Inwards and Outwards	1,500	2,500
Rent	3,750	
Postage and Telegrams	500	
Advertising Expenditure	9,000	
Opening stock	11,500	
Cash in hand	16,000	
Wages	14,000	
Telephone Charges	500	
Salaries to staff	12,250	
Printing and Stationery	750	
Commission	5,000	
Travelling Expenses	2,000	
Carriage Inwards	5,800	
Motor Van	20,860	
Bills payable		8,900
Total	**2,90,910**	**2,90,910**

You are required to prepare the Profit and Loss Account for the year ended December 31, 2000 and Balance Sheet as at that date. The following adjustments are to be made:

1. The value of stock on December 31, 2000 was Rs. 12,500.
2. Write off Rs. 250 from office furniture; 10% on plant and machinery and 20% on motor van.
3. Create a provision of 5% on the sundry debtors for bad debts.
4. Write off 1/5th of the advertising expenses.
5. Partners are entitled to interest on capital @ 5% p.a. and Akash is entitled to a salary of Rs. 1,800 p.a.

Solution

Books of Akriti and Akash
Profit and Loss Account for the year ended December 31, 2000.

Dr. **Cr.**

Particulars		*Amount (Rs.)*	*Particulars*		*Amount (Rs.)*
Opening Stock		11,500	Sales	1,60,000	
Purchases	85,000		Less : Returns	1,500	1,58,500
Less: Returns	2,500	82,500			
Wages		14,000			
Carriage Inwards		5,800			
Gross Profit c/f		57,200	Closing Stock		12,500
		1,71,000			**1,71,000**
Salaries to staff		12,250	Gross Profit b/f		57,200
Rent		3,750			
Postage and Telegram		500			
Advertising Exp. written off		1,800			
Telephone Charges		500			
Printing and Stationery		750			
Commission		5,000			
Travelling Expense		2,000			
Depreciation					
Plant	4,000				
Furniture	250				
Motor Van	4,172	8,422			
Provision for Bad Debts		2,025			
Salary to Akash		1,800			
Interest on capital :					
Aakriti	3,250				
Akash	2,000	5,250			
Net Profit Transferred to Capital a/c:					
Aakriti	7,892				
Akash	5,261	13,153			
Total		**57,200**	**Total**		**57,200**

Balance Sheet as at December 31, 2000

Liabilities		*Amount (Rs.)*	*Assets*		*Amount (Rs.)*
Aakriti's Capital	65,000		Goodwill		10,000
Less:Drawings	4,000		Plant and Machinery	40,000	
	61,000		Less: Depreciation	4,000	36,000
Add: Interest on Capital	3,250				
Net profits	7,892	72,142	Office Furniture	5,000	
			Less: Depreciation	250	4,750
Akash's Capital	40,000				
Less: Drawings	3,000		Motor Vans	20,860	
	37,000		Less: Depreciation	4,172	16,688
Add: Interest on Capital	2,000				
Salary	1,800		Sundry Debtors	40,500	
Net profits	5,261	46,061	Less: Provision	2,025	38,475
Sundry Creditors		14,510	Cash on hand		16,000
Bills Payable		8,900	Advertising exp.	9,000	
			Less: Written-off (1/5)	1,800	7,200
			Stock on hand		12,500
Total		**1,41,613**	**Total**		**1,41,613**

Illustration 3 (Distribution of profit)

Ajit, Choudhary and Vishal set up a partnership firm on January 1, 2001. They contributed Rs. 50,000, Rs. 40,000 and Rs. 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 Rs. 1,000 p.m. and Choudhary a commission of Rs. 5,000. It also provided that interest on capital be allowed @ 6% p.a. The drawings for the year were: Ajit Rs. 6,000, Choudhary Rs. 4,000 and Vishal Rs. 2,000. Interest on drawings Rs. 270 on Ajit's drawings, Rs. 180 on Choudhary's drawings and Rs. 90 on Vishal's drawings. The net amount of profit as per the profit and loss account for the year ended 2001 was Rs. 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.

Solution

Books of Ajit, Chaudhary and Vishal
Journal

Date 2001	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
End of the year	Profit and Loss a/c	Dr.		35,660	
	Profit and Loss Appropriation a/c				35,600
	(Transfer of Profit to Profit and Loss Appropriation Account)				
	Ajit's Salary a/c	Dr.		12,000	
	Ajit's Capital a/c				12,000
	(Amount of Ajit's Salary)				
	Profit and Loss Appropriation a/c	Dr.		12,000	
	Ajit's Salary a/c				12,000
	(Transfer of Ajit's Salary to Profit and Loss Appropriation Account)				
	Choudhary's Commission a/c	Dr.		5,000	
	Choudhary's Capital a/c				5,000
	(Amount of Choudhary's Commission)				
	Profit and Loss Appropriation a/c	Dr.		5,000	
	Choudhary's Commission a/c				5,000
	(Transfer of Choudhary's Commission to Profit and Loss Appropriation Account)				
	Interest on Capital a/c	Dr.		7,200	
	Ajit's Capital a/c				3,000
	Choudhary's Capital a/c				2,400
	Vishal's Capital a/c				1,800
	(Amount of interest on capital)				
	Profit and Loss Appropriation a/c	Dr.		7,200	
	Interest on Capital a/c				7,200
	(Transfer of Interest on Capital to Profit and Loss Appropriation Account)				
	Ajit's Capital a/c	Dr.		270	
	Choudhary's Capital a/c			180	
	Vishal's Capital a/c			90	
	Interest on Drawings a/c				540
	(Amount of interest on drawings)				
	Interest On Drawings a/c	Dr.		540	
	Profit and Loss Appropriation a/c				540
	(Transfer of Interest on drawings to Profit and Loss Appropriation Account)				

	Profit and Loss Appropriation a/c Dr.		12,000	
	Ajit's Capital a/c			6,000
	Choudhary's Capital a/c			4,000
	Vishal's Capital a/c			2,000
	(Amount of profit on appropriation)			

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

Dr. **Cr.**

Particulars		*Amount (Rs.)*	*Particulars*		*Amount (Rs.)*
Ajit's Salary		12,000	Net profit as per profit and loss account		35,660
Choudhary's Commission		5,000	Interest on Drawings :		
Interest on Capital:			Ajit's Capital	270	
Ajit's Capital	3,000		Choudhary's capital	180	
Choudhary's Capital	2,400		Vishal's Capital	90	540
Vishal's Capital	1,800	7,200			
Capital Accounts - Share of Profit:					
Ajit's Capital	6,000				
Choudhary's Capital	4,000				
Vishal's Capital	2,000	12,000			
Total		**36,200**	**Total**		**36,200**

Ajit's Capital Account

Dr. **Cr.**

Date 2001	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date 2001*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		6,000		Cash		50,000
	Interest on Drawings		270		Salary		12,000
	Balance c/f		64,730		Interest on Capital		3,000
					Profit and Loss Appropriation (Share of profit)		6,000
	Total		**71,000**		**Total**		**71,000**

Choudhary's Capital Account

Dr. **Cr.**

Date 2001	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date 2001*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		4,000		Cash		40,000
	Interest on Drawings		180		Commission		5,000
	Balance c/f		47,220		Interest on Capital		2,400
					Profit and Loss Appropriation (Share of profit)		4,000
	Total		**51,400**		**Total**		**51,400**

Vishal's Capital Account

Dr. **Cr.**

Date 2001	*Particulars*	*J.F.*	*Amount (Rs.)*	*Date 2001*	*Particulars*	*J.F.*	*Amount (Rs.)*
	Drawings		2,000		Cash		30,000
	Interest on Drawing		90		Interest on Capital		1,800
	Balance c/f		31,710		Profit and Loss Appropriation (Share of profit)		2,000
	Total		**33,800**		**Total**		**33,800**

Illustration 4 (Distribution of profit)

Pawan and Purna are partners in a firm sharing profits in the ratio of 3:2. The balance in their capital and current accounts as on January1, 1998 were as under :

	Pawan (Rs.)	*Purna (Rs.)*
Capital Account	30,000	20,000
Current Account (Cr.)	10,000	8,000

The partnership deed provided that Pawan is to be paid salary @ Rs. 500 p.m. whereas Purna is to get commission of Rs. 4,000 for the year.

Interest on capital is to be allowed @ 6% p.a. The drawings of Pawan and Purna for the year were Rs. 3,000 and Rs. 1,000, respectively. Interest on drawings for Pawan and Purna works out at Rs. 75 and Rs. 25, respectively. The net profit of the firm before making these adjustments was Rs. 24,900.

Prepare the Profit and Loss Appropriation Account and the partners' capital and current accounts.

Solution

Books of Pawan and Purna

Profit and Loss Appropriation Account for the year ended Dec. 31,1998

Dr. **Cr.**

Particulars		*Amount (Rs.)*	*Particulars*		*Amount (Rs.)*
Pawan's Salary		6,000	Net profit as per Profit and Loss account		24,900
Purna's Commission		4,000	Interest on drawings :		
Interest on Capital:			Pawan's current a/c	75	
Pawan's current	1,800		Purna's current a/c	25	100
Purna's current	1,200	3,000			
Capital accounts (Share of Profit):					
Pawan's current	7,200				
Purna's current	4,800	12,000			
Total		**25,000**	**Total**		**25,000**

Partners' Capital Account

Dr. **Cr.**

Date 1998	*Particulars*	*J. F.*	*Pawan Rs.*	*Purna Rs.*	*Date 1998*	*Particulars*	*J. F.*	*Pawan Rs.*	*Purna Rs.*
	Balance c/f		30,000	20,000		Balance b/f		30,000	20,000

Partners' Current Account

Dr. **Cr.**

Date 1998	*Particulars*	*J.F.*	*Pawan Rs.*	*Purna Rs.*	*Date 1998*	*Particulars*	*J.F.*	*Pawan Rs.*	*Purna Rs.*
	Drawings		3,000	1,000		Balance b/f		10,000	8,000
	Interest on Drawing		75	25		Salary		6,000	--
						Commission		--	4,000
	Balance c/f		21,925	16,975		Interest on Capital		1,800	1,200
						Share of profit		7,200	4,800
	Total		**25,000**	**18,000**		**Total**		**25,000**	**18,000**

1.3.3 Calculation of Interest on Capital

If the partnership agreement specifically provides for the payment of the interest on the capital contributed by the partners, the same has to be allowed. Interest to be allowed on capital is to be calculated with respect to the time, rate and amount. Generally, following points are to be borne in mind while calculating the interest on capital:

1. Normally, interest on the opening balance at the beginning of the year is allowed for the whole accounting year.
2. If additional capital is invested during the year, interest for the relevant period is calculated.
3. If part of the capital is withdrawn during the year, interest on the part of the capital that was invested for the whole year, interest is calculated for the whole year and it is added with the amount of interest that is calculated on the remaining capital that was invested for the relevant period. For example, Anmol has Rs. 30,000 as balance in his capital account at the beginning of the year. In the middle of the year he withdrew Rs.10,000 from his capital. He is entitled for interest @ 10% p.a.

In this case, interest will be calculated in the following manner:

$$(20{,}000 \times 10/100) + (10{,}000 \times 10/100 \times 1/2) = \text{Rs. } 2{,}500;$$

Alternatively, we can calculate interest on capital with respect to the amount remained invested for the relevant period. In the above example, the interest may also be calculated as follows:

$$(30{,}000 \times 10/100 \times 1/2) + (20{,}000 \times 10/100 \times 1/2) = \text{Rs. } 2{,}500.$$

Illustration 5 (Interest on Capital)

Mansoor and Reshma are partners in a firm. Their capital accounts showed the balance on Jan 1, 2000 as Rs. 20,000 and Rs. 15,000 respectively.During the year, Mansoor introduced additional capital of Rs.10,000 on May 1, 2000 and Reshma brought in further capital of Rs.15,000 on July 1, 2000. Reshma withdrew Rs. 5,000 from her capital on October 1, 2000. Interest is allowed @ 6% p.a. on the capitals. Calculate the interest to be paid on the capital.

Solution

Statement showing calculation of interest

Particulars	*Mansoor* Rs.	*Reshma* Rs.
1. Interest on capital balance on Jan 1, 2000:		
Mansoor – (20,000×6/100)	1,200	
Reshma – (15,000×6/100)		900
2. Add interest on additional capital:		
Mansoor – (10,000×6/100×8/12)	400	
Reshma – (15,000×6/100×6/12)		450
3. Less: Interest on capital withdrawn by Reshma (5000×3/12×6/100)		(75)
Total Interest Payable	**1,600**	**1,275**

1.3.4 Calculation of Interest on Drawings

Interest on drawings is to be charged from the partners, if the same has been specifically provided in the partnership deed. Interest on drawings is to be calculated with reference to the time period for which the money was withdrawn. Following may be the possibilities requiring the different calculations of interest when:

(1) Amount, rate of interest and date of withdrawal is given:

Suppose, Johnson is a partner who withdrew Rs. 20,000 on October 1, 2002. Interest on drawings is charged @ 10% per annum. The calculation of interest will be as follows:

$$\text{Rs. } 20{,}000 \times \frac{10}{100} \times \frac{3}{12} = \text{Rs. } 500$$

(2) Amount and rate of interest are given but date of withdrawal is not specified:

Suppose, Ahmed is a partner who withdraws Rs. 20,000 and interest on drawings is charged @ 10% per annum. The calculation of interest will be as follows:

$$\text{Rs. } 20{,}000 \times \frac{10}{100} \times \frac{6}{12} = \text{Rs. } 1{,}000$$

Here, it is noted that in the absence of any particular date of withdrawal, it is assumed that withdrawals are made evenly throughout the year. Hence, interest is charged for the average of the period of the year, i.e., six months.

(3) Fixed amount is withdrawn every month:

In this case, there may be three possibilities and accordingly the interest for that period will be charged:

a) If amount is withdrawn during the month (implicitly assumed to be in the middle of month), interest is calculated for six months;

b) If the withdrawal is made in the beginning of the month, interest is calculated for 6½ months (six and a half months), and

c) If withdrawal is made at the end of the month, interest is calculated for 5 ½ months (five and a half months).

(4) If amount is withdrawn at each quarter:

(a) If amount is withdrawn in the beginning of each quarter, in this case the interest is calculated on total drawings for a period of seven and a half months, and

(b) If amount is withdrawn at the end of each quarter, the amount of interest is calculated on total drawings for a period of four and a half months.

(5) Different amounts are withdrawn at different intervals:

In this case, the sum of the product of amount withdrawn and the time is calculated and then the rate of interest is applied for a period of one month. For example, Sonu withdraws Rs. 1,000 on March 1; Rs. 2,000 on 30th June; Rs. 1,000 on 1st November and Rs. 2,000 on 31st December. Interest on drawings is charged at 10% per annum. In this case, interest on drawings will be calculated as follows :

Statement of Calculation of Interest on Drawings

(1)	(2)	(3)	(4)	(5)	
Date	*Amount(Rs.)*	*Time Period*	*Product*	*Interest*(Rs.)*	
			(2×3)		
March 1	1000	10 Months	10,000	10,000 × 10/100 × 1/12	= 83.33
June 30	2000	6 Months	12,000	12,000 × 10/100 × 1/12	= 100
Nov.1	1000	2 Months	2,000	2,000 × 10/100 × 1/12	= 16.67
Dec.31	2000	0	0		0
Total			**24,000**		**200***

* *Instead of this cumbersome calculation, the same result can be obtained by calculating the Interest on the sum of product for a period of one month = Rs. 24,000 × 10/100 × 1/12 = Rs. 200*

Illustration 6 (Interest on Drawings)

Rajesh is a partner in a firm. He withdrew the following amounts during the year 2000 :

	Rs.
January 31	6,000
March 31	4,000
June 30	8,000
September 30	3,000
October 31	5,000

The interest on drawings is to be charged @ 6% p.a. Assuming the accounting year closes on December 31each year, interest on drawings to be debited to Rajesh shall be worked out as follows :

1	2	3	4
Date	*Amount(Rs.)*	*Period Months*	*Product(Rs.)*
			(2×3)
Jan 31	6,000	11	66,000
March 31	4,000	9	36,000
June 30	8,000	6	48,000
Sept 30	3,000	3	9,000
Oct 31	5,000	2	10,000
Total	**26,000**		**1,69,000**

Interest on drawings for one month on the sum of products :

$$\frac{\text{Rate of interest}}{100} \times \text{sum of products} \times \frac{1}{12}$$

= 6/100 × Rs. 1,69,000 × 1/12

= Rs. 845

Alternatively, interest can be calculated separately for each amount for the period involved and then totalled. In that case also, we shall arrive at the same amount of interest.

Illustration 7 (Interest on drawings)

Amit and Sonu are partners sharing profits equally. Amit withdrew Rs. 1,000 p.m. regularly on the first day of every month for personal expenses. If interest on drawings is to be charged @ 5% p.a., calculate the interest on the drawings of Amit.

Solution

Calculation of Interest on Drawings

(1) Date 2001	*(2) Amount of drawings(Rs.)*	*(3) Period for which money has been used*	*(4) Product(Rs.) (2 × 3)*
Jan 1	1,000	12	12,000
Feb 1	1,000	11	11,000
Mar 1	1,000	10	10,000
Apr 1	1,000	9	9,000
May 1	1,000	8	8,000
June 1	1,000	7	7,000
July 1	1,000	6	6,000
Aug 1	1,000	5	5,000
Sept 1	1,000	4	4,000
Oct 1	1,000	3	3,000
Nov 1	1,000	2	2,000
Dec 1	1,000	1	1,000
Total	**12,000**		**78,000**

Interest on Drawings = Rate of Interest/100 × 1/12 × Sum of the product
= 5/100 × 1/12 × 78,000
= Rs. 325

It may be noted that when a fixed amount is drawn at regular intervals, the interest on drawings can also be calculated on the basis of the average period. The calculation of the average period depends upon the fact whether the fixed amount is withdrawn on the first day of every month or the last day of every month.

If the fixed amount is withdrawn on the first day of every month, the average period will be calculated with the help of following formula :

Average period = (Total period in months + 1)/2

If the fixed amount is withdrawn on the last day of every month, the average period will be calculated by the following formula :

Average period = (Total period in months – 1)/2

In illustration 6, the partners withdrew a fixed amount on the first day of every month. Hence, the interest on drawings can also be calculated by applying the average period formula.

Average period = (Total period in months + 1)/2

= (12 +1)/2 = 6.5 Months

Interest on drawings for 6.5 months @ 5% p.a.

$$= 12000 \times \frac{5}{100} \times \frac{13}{2} \times \frac{1}{12}$$

= Rs. 325

Illustration 8 (Interest on Drawings)

Maneesh and Mohan are partners in a firm. The partnership deed provided that interest on drawings will be charged @ 6% p.a.. During the year ended, December 31, 2002, Maneesh withdrew Rs.5,000 in the beginning of each quarter and Mohan withdrew Rs. 5,000 at the end of each quarter. Calculate interest on the partners' drawings.

Solution

Maneesh's total drawings	= Rs.5,000 × 4	= Rs.20,000
Mohan's total drawings	= Rs.5,000 × 4	= Rs.20,000

Interest on Maneesh's Drawings :

Number of months for which interest will be charged = $\frac{12+3}{2} = 7.5 \text{ months}$

Interest = $\text{Rs. } 20{,}000 \times \frac{6}{100} \times \frac{15}{2} \times \frac{1}{12} = \text{Rs. } 750$

Interest on Mohan's drawings :

Number of months for which interest will be charged = $\frac{12-3}{2} = 4.5 \text{ months}$

Interest = $\text{Rs. } 20{,}000 \times \frac{6}{100} \times \frac{9}{2} \times \frac{1}{12} = \text{Rs. } 450$

1.4 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 :

(a) Guarantee to one partner by (others) the firm,

(b) Guarantee to a partner by another partner individually.

(*a) 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, Soni and Mita are partners and they decide to admit Mary into the partnership firm. The profit sharing ratio is agreed as 3:2:1 with a guaranteed amount of Rs. 5,000 to Mary. For the year ended 2001, the business earns a profit of Rs. 24,000. Mary's share works out to Rs. 4,000 (1/6 of Rs. 24,000). This is Rs. 1,000 less than the guaranteed amount of Rs. 5,000. Hence, Mary will get Rs. 4,000 as her share of the profit in the profit sharing ratio and the deficiency of Rs.1,000 (i.e. the amount by which Rs. 4,000 falls short of the guaranteed amount) shall be transferred to the credit of Mary by transfer from Soni and Mita in their profit sharing ratio, i.e. 3:2.

Illustration 9 (Guarantee of Profit)

Mouse, Keyboard and Monitor are partners. They admit Printer as a partner with a guarantee that his share of profits shall not be less than Rs. 20,000 p.a. Profits are to be shared in the proportion of 4:3:3:2. The total profits for the year ended 2002 were Rs. 96,000. Prepare the profit and loss appropriation account showing the division of the profits for the year.

Solution

Books of Mouse, Key Board and Monitor
Profit and Loss Appropriation Account
for the year ended........2002

Dr. **Cr.**

Particulars	*Amount (Rs.)*	*Particulars*	*Amount (Rs.)*
Mouse	30,400	Net Profits	96,000
Keyboard	22,800		
Monitor	22,800		
Printer	20,000		
Total	**96,000**	**Total**	**96,000**

Notes to Solution :

Printer's share = Rs. 96,000 × 2/12 = Rs. 16,000.
Since Printer has been guaranteed a minimum amount of Rs. 20,000, therefore, he will given Rs. 20,000 and remaining amount i.e., Rs. 20,000 – Rs.16,000 = Rs. 4,000 will be borne by Mouse, Keyboard and Monitor in the ratio of 4:3:3.

Mouse's share	= Rs. 96,000 × 4/12	=	Rs. 32,000	
Less : contribution to Printer (Rs. 4,000 × 4/10)		=	Rs. 1,600	Rs. 30,400
Keyboard's share	= Rs. 96,000 × 3/12	=	Rs. 24,000	
Less: contribution to Printer (Rs. 4,000 × 3/10)		=	Rs. 1,200	Rs. 22,800
Monitor's share	= Rs. 96,000 × 3/12	=	Rs. 24,000	
Less: contribution to Printer (Rs. 4,000 × 3/10)		=	Rs. 1,200	Rs. 22,800

(b) 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. In illustration 9, all the three partners have agreed to guarantee Printer for the minimum share of profit. Hence, these three divided the Printer's share in the ratio of 4:3:3. Suppose Mouse alone agrees to guarantee Printer then profit distribution will be as follows :

Mouse's share	Rs. 96,000 × 4/12 =	Rs. 32,000
Less : Printer's share		Rs. 4,000
Final share of Mouse		Rs. 28,000

In other words Keyboard and Monitor will get full share, i.e. Rs.24,000 each.

Illustration 10 (Guarantee of Profit)

Kim and Lal are partners in a firm sharing profit in the ratio of 2:1. They decide to admit Mohit with 1/4th share in profits with a guaranteed amount of Rs. 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 Rs. 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 (Rs.)*	*Particulars*	*Amount (Rs.)*
Share of Profit			Net Profit as per profit and loss account	76,000
Kim				
(2/4 of 76,000)	38,000			
Less: Mohit's deficiency				
(2/3 of 9,000)	6,000	32,000		
Lal				
(1/4 of 76,000)		19,000		
Mohit				
(1/4 of 76,000)	19,000			
Add: deficiency				
borne by Kim	6,000	25,000		
Total		**76,000**	**Total**	**76,000**

Notes to the Solution :

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

1.3.4 Past Adjustments

Sometimes, after the final accounts have been prepared and the partners' capital account are closed, it is found that certain items have been omitted by mistake or have been wrongly treated. Such omissions and commissions usually relate to the interest on capital, interest on drawings, salary to partners, etc. In such a situation, necessary adjustments have to be made in the partners' capital account through an account called Profit and Loss Adjustment 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 ascertain 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.
   Partners' Capital a/c (individually)

3. Work out the amounts of omitted items which are to be debited to Partners' Capital Accounts such as interest on drawings and record the following adjustment entry are recorded :

   Partners' Capital (individually) a/c Dr.
   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 the profit and the debit balance, 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 Dr.
   Partners' Capital (individually) a/c

   If it is a debit balance (loss)

   Partners' Capital (individually) a/c Dr.
   Profit and Loss Adjustment a/c

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.

Illustration 11 (Past adjustments)

Asha and Bony are partners in a firm sharing profits equally. Their capital accounts as on December 31, 2000 showed balances of Rs. 60,000 and Rs. 50,000 respectively. After taking into account the profits of the year 2000, which amounted to Rs 20,000, it was subsequently found that the following items have been left out while preparing the final account of the year ended 2000.

(i) The partners were entitled to interest on capitals @ 6% p.a.

(ii) The drawings of Asha and Bony for the year 2000 were Rs.8,000 and Rs.6,000 respectively. The interest on drawings was also to be charged @ 5% p.a.

(iii) Asha was entitled to salary of Rs.5,000 and Bony, a commission of Rs.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.

Solution

(1) Partners capital at the beginning

	Asha (*Rs.*)	*Bony* (*Rs.*)
Capital at the end	60,000	50,000
Less: Share of Profit	(10,000)	(10,000)
(Rs. 20,000 shared equally)	50,000	40,000
Add: Drawings	8,000	6,000
Capital at the beginning	**58,000**	**46,000**

(2) Interest on Capital

For Asha : 58,000 × 6/100 = Rs. 3,480
For Bony : 46,000 × 6/100 = Rs. 2,760

(3) Interest on Drawings

For Asha : on Rs. 8,000 @ 5% p.a. for 6 months.

$$8{,}000 \times \frac{5}{100} \times \frac{6}{12} = \text{Rs. } 200$$

For Bony : on Rs. 6,000 @ 5% p.a. for 6 months

$$6{,}000 \times \frac{5}{100} \times \frac{6}{12} = \text{Rs . } 150$$

Books of Asha and Bony
Journal

Date 2000	*Particulars*		*L.F.*	*Debit Amount (Rs.)*	*Credit Amount (Rs.)*
Dec 31	Profit and Loss Adjustment a/c	Dr.		6,240	
	Asha's Capital a/c				3,480
	Bony's Capital a/c				2,760
	(Amount of interest on capital)				
,,	Asha's Capital a/c	Dr.		200	
	Bony's Capital a/c	Dr.		150	
	Profit and Loss Adjustment a/c				350
	(Amount of interest on drawings)				
,,	Profit and Loss Adjustment a/c	Dr.		5,000	
	Asha's Capital a/c				5,000
	(Amount of salary)				
,,	Profit and Loss Adjustment a/c	Dr.		2,000	
	Bony's Capital a/c				2,000
	(Amount of commissions)				
,,	Asha's Capital a/c	Dr.		6,445	
	Bony's Capital a/c	Dr.		6,445	
	Profit and Loss Adjustment a/c				12,890
	(Amount of loss on adjustment)				

Profit and Loss Adjustment Account
for the year ended December 31, 2000

Dr. **Cr.**

Particulars		*Amount (Rs.)*	*Particulars*		*Amount (Rs.)*
Capital (Interest on capital)			Capital (Interest on Drawings)		
Asha	3,480		Asha	200	
Bony	2,760	6,240	Bony	150	350
Asha's capital (Salary)		5,000	Capital (Loss on adjustments)		
Bony's capital (Commission)		2,000	Asha	6,445	
			Bony	6,445	12,890
Total		**13,240**	**Total**		**13,240**

Partners' Capital Account

Dr. **Cr.**

Date 2000	*Particulars*	*J.F.*	*Asha's Rs.*	*Bony's Rs.*	*Date 2000*	*Particulars*	*J.F.*	*Asha's Rs.*	*Bony's Rs.*
Dec31	Profit and Loss Adjustment: (interest on drawings)		200	150	Dec 31	Balance b/f		60,000	50,000
	Profit and Loss Adjustment: (Loss on Adjustment)		6,445	6,445		Profit and Loss Adjustment: (Interest on capital)		3,480	2,760
	Balance c/f		61,835	48,165		Profit and Loss Adjustment: (Salary)		5,000	
						Profit and Loss Adjustment: (Commission)			2,000
			68,480	**54,760**				**68,480**	**54,760**
						Balance b/f		61,835	48,165

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.

Analysis Table

Particulars	*Asha* *(Rs.)*	*Bony* *(Rs.)*
Amount credited (Interest on capital, salary and commission)	8,480	4,760
Amount debited (Interest on drawings and share of loss)	6,645	6,595
	Cr. 1,835	Dr. 1,835

Journal Entry

Bony's Capital a/c	Dr.	1,835	
Asha's Capital a/c			1,835

Alternatively: A detailed statement can be prepared as follows :

Statement of Adjustment

Particulars	*Amount already recorded*		*Amount as should have been recorded*		*Adjustment*
	Dr. (Rs.)	*Cr. (Rs.)*	*Dr. (Rs.)*	*Cr. (Rs.)*	*Dr./Cr (Rs.)*
Asha's Capital :	--	--	--		
Interest on Capital	--	--		3,480	
Interest on Drawings	--	--	200		
Salary	--		--	5,000	
Share of Profit		10,000		3,555	
			200	12,035	
NET		**10,000**	--	**11,835**	**Cr. 1,835**
Bony's Capital :					
Interest on Capital	--	--	--	2,760	
Interest on Drawings	--	--	150	--	
Commission	--	--	--	2,000	
Share of Profit	--	10,000	--	3,555	
			150	8,315	
NET		**10,000**	**--**	**8,165**	**Dr. 1,835**

Direct Adjustment Entry

Bony's Capital a/c	Dr. 1,835	
Asha's Capital a/c		1,835

Note : Share of Profit has been worked out as under :

Profit and Loss Appropriation Account for the year ended December 31, 2000

Dr. **Cr.**

Particulars		*Amount (Rs.)*	*Particulars*		*Amount (Rs.)*
Interest on Capital			Profit as per Profitand Loss a/c		20,000
Asha	3,480		Interest on Drawings :		
Bony	2,760	6,240	Asha's	200	
Asha's Capital (Salary)		5,000	Bony's	150	350
Bony's Capital (Commission)		2,000			
Share of Profit :					
Asha	3,555				
Bony	3,555	7,110			
Total		**20,350**	**Total**		**20,350**

1.6 Goodwill

Goodwill is also one of the special aspects of partnership accounts which requires adjustment at the time of a change in the profit sharing ratio, the admission of a partner or the retirement or death of a partner.

1.4.1 Meaning of Goodwill

Over a period of time, a well-established business develops an advantage of good name, reputation and wide business connections. This helps the business to earn more profits as compared to a newly set up business. In accounting, the monetary value of such advantage is known as 'goodwill'.

It is regarded as an intangible asset. In other words, goodwill is the value of the reputation of a firm in respect of the profits expected in future over and above the normal profits. It is generally observed that when a person pays for goodwill, he/she pays for something, which places him in the position of being able to earn super profits as compared to the profit earned by other firms in the same industry.

In simple words, goodwill can be defined as "the present value of a firm's anticipated excess earnings" or as "the capitalized value attached to the differential profit capacity of a business". Thus, goodwill exists only when the firm earns super profits. Any firm that earns normal profits or is incurring losses has no goodwill.

1.6.2 Factors giving rise to Goodwill

The main factors helping the creation of goodwill are as follows :

1. *Nature of Business :* A firm that produces high value added products or having a stable demand is able to earn more profits and therefore has more goodwill.
2. *Location :* If the business is centrally located or is at a place having heavy customer traffic, the goodwill tends to be high.
3. *Efficiency of Management :* A well-managed concern usually enjoys the advantage of high productivity and cost efficiency. This leads to higher profits and so the value of goodwill will also be high.
4. *Market situation :* The monopoly condition or limited competition enables the concern to earn high profits which leads to higher value of goodwill.
5. *Special Advantages :* The firm that enjoys special advantages like import licences, low rate and assured supply of electricity, long-term contracts for supply of materials, well-known collaborators, patents, trade marks, etc. enjoy higher value of goodwill.

1.6.3 Need for Valuation

Normally, the need for valuation of goodwill arises at the time of the sale of a business. But, in case of a partnership firm it may also arise in the following circumstances:

1. Change in the profit sharing ratio amongst the existing partners;
2. Admission of a new partner;
3. Retirement of a partner;
4. Death of a partner;
5. Dissolution of a firm which involves sale of business as a going concern; and
6. Amalgamation of firms.

1.6.4 Methods of Valuation of Goodwill

The important methods of valuation of goodwill are as follows :

1. *Average Profits 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, therefore, should be calculated by multiplying the past average profits by the number of years during which the anticipated profits are expected to accrue.

   For example, if the past average profits of a business works out at Rs. 20,000 and it is expected that the same profits will be available in future, the value of goodwill will be Rs. 60,000 (Rs. 20,000 × 3), if three years, purchase of the past average profits constitute the basis of valuation of the goodwill.

Illustration 12 (Goodwill)

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

Solution

Year *Rs.*	*Profit* *Rs.*
1999	4,00,000
2000	3,98,000
2001	4,50,000
2002	4,45,000
2003	5,00,000
Total	**21,93,000**

Average Profit $= \frac{\text{Total profit of last 5 years}}{\text{No. of years}} = \frac{\text{Rs. } 21,93,000}{5} = \text{Rs. } 4,38,600$

Goodwill = Average Profits × No. of years purchased
= Rs. 4,38,600 × 4 = Rs. 17,54,400

Illustration 13 (Goodwill)

Compute the value of goodwill on the basis of four years' purchase of the average profits based on the last five years.

The profits for the last five years were as follows :

Year	Rs.
1999	40,000
2000	50,000
2001	60,000
2002	50,000
2003	60,000

Solution

Calculation of Average Profits

Year	(Profits) Rs.
1999	40,000
2000	50,000
2001	60,000
2002	50,000
2003	60,000
Total	**2,60,000**

Average Profits = 2,60,000/5

= Rs. 52,000

Goodwill = Rs. 52,000 × 4

= Rs. 2,08,000

Illustration 14 (Goodwill)

The following were the profits of a firm for the last three years.

Year ending March 31	Profit (Rs.)	
2000	4,00,000	(including an abnormal gain of Rs. 50,000)
2001	5,00,000	(after charging an abnormal loss of Rs. 1,00,000)
2002	4,50,000	(excluding Rs. 50,000 payable on the insurance of plant and machinery)

Calculate the value of firm's goodwill on the basis of two years purchase of the average profits for the last three years.

Solution

Calculation of average maintainable profits.

Year ended	*Profit (Rs.)*
2000 (4,00,000 – 50,000)	3,50,000
2001 (5,00,000 + 1,00,000)	6,00,000
2002 (4,50,000 – 50,000)	4,00,000
Total	**13,50,000**

$$\text{Average profit} = \frac{\text{Rs. }13{,}50{,}000}{3} = \text{Rs. }4{,}50{,}000$$

Goodwill at 2 years purchase of Average Profit

= Rs. 4,50,000 × 2 = Rs. 9,00,000

The above calculation of goodwill is based on the assumption that no change in the overall situation of profits is expected in the future.

1. *Weighted Average Profit Method :* This method is a modified version of the earlier method. Under this method each year's profit is multiplied by the respective number of weights i.e. 1,2,3,4 etc., in order to find out value of product and the total of products is then divided by the total of weights in order to ascertain the weighted average profits. Thereafter, the weighted average profit is multiplied by the agreed number to find out the value of goodwill.

$$\text{Weighted Average Profit} = \frac{\text{Total of Products of Profits}}{\text{Total of Weights}}$$

Goodwill = Weighted Average Profits × Agreed Number of years'(Purchase)

Weighted average profit method of valuation of goodwill is better than the simple average profit method because it gives weightage to latest profit,which is likely to be maintained in the future by the firm. It is applicable when the profit shows a rising or falling trend.

Illustration 15 (Goodwill)

The profits of a firm for the year ended 31st March for the last five years were as follows :

Year	*Profit (Rs.)*
1999	20,000
2000	24,000
2001	30,000
2002	25,000
2003	18,000

Calculate the value of goodwill on the basis of three years' purchase of weighted average profits after weights 1,2,3,4 and 5 respectively to the profits for 1999, 2000, 2001, 2002 and 2003.

Solution

Year ended 31 March	*Profit Rs.*	*Weight*	*Product*
1999	20,000	1	20,000
2000	24,000	2	48,000
2001	30,000	3	90,000
2002	25,000	4	1,00,000
2003	18,000	5	90,000
Total		**15**	**3,48,000**

Weighted Average Profit $\frac{3,48,000}{15} = \text{Rs.}\,23,200$

Goodwill $= 23,200 \times 3 = \text{Rs. } 69,600$

Illustration 16 (Goodwill)

Calculate goodwill of a firm on the basis of three years' purchase of the weighted average profits of the last four years. The profit of the last four years were : 2000 Rs. 20,200; 2001 Rs. 24,800; 2002 Rs.20,000 and 2003 Rs. 30,000. The weights assigned to each year are : 2000-1; 2001- 2; 2002- 3 and 2003-4.

You are supplied the following information :

(i) On September 1, 2002 a major plant repair was undertaken for Rs. 6,000 which was charged to revenue. The said sum is to be capitalized for goodwill calculation subject to adjustment of depreciation of 10% p.a. on reducing balance method.

(ii) The closing stock for the year 2001 was overvalued by Rs. 2,400.

(iii) To cover management cost an annual charge of Rs. 4,800 should be made for the purpose of goodwill valuation.

Solution

Calculation of adjusted profit	*2000 Rs.*	*2001 Rs.*	*2002 Rs.*	*2003 Rs.*
Given Profits	20,200	24,800	20,000	30,000
Less Management Cost	4,800	4,800	4,800	4,800
	15,400	20,000	15,200	25,200
Add Capital expenditure charged to revenue	-	-	6,000	-
	15,400	20,000	21,200	25,200
Less unprovided depreciation	-	-	200	580
	15,400	20,000	21,000	24,620
Less over valuation of closing stock	-	2,400	-	-
	15,400	17,600	21,000	24,620
Add over value of opening stock	-	-	2,400	-
Adjusted Profit	15,400	17,600	23,400	24,620

Calculation of weighted average profits :

Year	*Profit Rs.*	*Weight*	*Product*
2000	15,400	1	15,400
2001	17,600	2	35,200
2002	23,400	3	70,200
2003	24,620	4	98,480
Total		**10**	**2,19,280**

Weight Average Profit $= \dfrac{2,19,280}{10} = \text{Rs.}\ 21,928$

Goodwill $=$ 21,928 × 3 = Rs. 65,784

Notes to the Solution

(i)	Depreciation of 2002	= 10% of Rs. 6,000 for 4 months = 6,000 × 10/100 × 4/12 = Rs. 200
(ii)	Depreciation of 2003	= 10% of Rs. 6,000 – Rs. 200 for one years = 5,800 ×10/100 = Rs. 580
(iii)	Closing stock of 2001 will become opening stock of 2002.	

2. *Super Profits Method :* The basic assumption in the average profits method of calculating goodwill is that, if a new business is set up, it will not be able to earn any profits during the first few years of its operations. Hence, the person who purchases an existing business has to pay in the form of goodwill a sum equal to the total profits he is likely to receive for the first 'few years'.

It is also contended that the buyer's real benefit does not lie in total profits; it is limited to such amounts of profits which are in excess of the normal return on capital employed in similar business. Therefore, it is desirable to value, goodwill on the basis of the excess profits and not the actual profits. The excess of actual profits over the normal profits is termed as super profits. Normal profits can be ascertained as follows :

$$\textbf{Normal Profits} = \frac{\textbf{Capital Employed} \times \textbf{Normal Rate of Return}}{\textbf{100}}$$

Suppose an existing firm earns Rs. 18,000 on the capital of Rs. 1,50,000 and the normal rate of return is 10%. The Normal profits will work out at Rs.15,000 (1,50,000 × 10/100). The super profits in this case will be Rs. 3,000 (Rs. 18,000 – 15,000).

The goodwill under the super profits method is ascertained by multiplying the super profits by certain number of years' purchase. If, in the above example, it is expected that the benefit of super profits is likely to be available for 5 years in future, the goodwill will be valued at Rs. 15,000 (3,000 × 5). Thus, 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.

Illustration 17 (Goodwill)

The books of business showed that the capital employed on December 31,2001, Rs. 5,00,000 and the profits for the last five years were: 1997-Rs. 40,000; 1998-Rs. 50,000; 1999-Rs. 55,000; 2000-Rs. 70,000 and 2001-Rs. 85,000. 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%.

Solution

$$\text{Normal Profit} = \frac{\text{Capital Employed} \times \text{Normal Rate of Return}}{100}$$

$$= \frac{5,00,000 \times 10}{100} = \text{Rs. } 50,000$$

Average Profits :

Year	*Profit* Rs.
1997	40,000
1998	50,000
1999	55,000
2000	70,000
2001	85,000
Total Profit	**Rs. 3,00,000**

Average Profit = Rs. 3,00,000/5 = Rs. 60,000
Super Profit = Rs. 60,000 – Rs. 50,000 = Rs. 10,000
Goodwill = Rs. 10,000 × 3 = Rs. 30,000

Illustration 18 (Goodwill)

Capital employed in a business on March 31, 2003 was Rs. 20,00,000 and the profits for the last five years were as follows :

Year ending 31st March	*Profit Rs.*
1999	2,60,000
2000	2,80,000
2001	2,70,000
2002	2,50,000
2003	2,10,000

Calculate the value of goodwill on the basis of 3 years' purchase of the super profits of the business. The normal rate of return is 10%.

Solution

Normal Profit $= \dfrac{\text{Capital Employed} \times \text{Normal Rate of Return}}{100}$

$= \dfrac{\text{Rs. } 20{,}00{,}000 \times 10}{100} = \text{Rs. } 2{,}00{,}000$

Average Profit $= \dfrac{\text{Rs. } 2{,}60{,}000 + 2{,}80{,}000 + 2{,}70{,}000 + 2{,}50{,}000 + 2{,}10{,}000}{5}$

$= \dfrac{\text{Rs.} 12{,}70{,}000}{5} = \text{Rs. } 2{,}54{,}000$

Super Profit = Average Profit – Normal Profit
= 2,54,000 – 2,00,000
= Rs. 54,000

Goodwill = Super Profit × No. of years purchase
= 54,000 × 3
= Rs. 1,62,000

Illustration 19 (Goodwill)

The capital of the firm of Anu and Benu is Rs. 1,00,000 and the market rate of interest is 15%. Annual salary to partners is Rs. 6,000 each. The profits for the last 3 years were Rs. 30,000; Rs. 36,000 and Rs. 42,000. Goodwill is to be valued at 2 years purchase of the last 3 years' average super profits. Calculate the goodwill of the firm.

Solution

Interest on capital $= 1{,}00{,}000 \times \dfrac{15}{100}$ = Rs. 15,000 .... (i)

Add partner's salary = Rs. 6,000 × 2 = Rs. 12,000 .... (ii)

Normal Profit (i + ii) = Rs. 27,000

Average Profit = Rs. 30,000 + Rs. 36,000 + Rs. 42,000 $= \dfrac{\text{Rs. } 1{,}08{,}000}{3}$

= Rs. 36,000

Super Profit	=	Average Profit – Normal Profit
	=	Rs. 36,000 – Rs. 27,000
	=	Rs. 9,000
Goodwill	=	Super Profit × No of years' purchase
	=	Rs. 9,000 × 2
	=	Rs. 18,000

3. *Capitalization Method :* Under this method the goodwill can be calculated in two ways : (a) by capitalizing the average profits, or (b) by capitalizing the super profits.

   (a) *Capitalization of Average Profit :* In this method, the value of goodwill is ascertained by deducting the actual capital employed (net assets) in the business from the capitalized value of the average profits on the basis of normal rate of return. This involves the following steps :

      (i) Ascertain the average profits based on the past few years' performance.

      (ii) Capitalize the average profits on the basis of the normal rate of return as follows :

      Average Profits × 100/Normal Rate of Return

      This will give the total value of business.

      (iii) Ascertain the actual capital employed (net assets) by deducting outside liabilities from the total assets (excluding goodwill).

Capital Employed = Total Assets (excluding goodwill) – outside liabilities

      (iv) Compute the value of goodwill by deducting net assets from the total value of business, i.e. (ii) – (iii).

Illustration 20 (Goodwill)

A business has earned average profits of Rs. 1,00,000 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 Rs. 8,20,000.

Solution

Capitalized Value of Average Profits

$$= \frac{\text{Rs. } 1,00,000}{10} \times 100 = \text{Rs } 10,00,000$$

Goodwill = Capitalized Value – Net Assets
= 10,00,000 – 8,20,000
= Rs. 1,80,000

(b) Capitalization of Super Profits : Under this method following steps are involved :

(i) Calculate Capital employed of the firm, which is equal to total assets minus outside liabilities.

(ii) Calculate required profit on capital employed by using the following formula :

Profit = Capital Employed × Required Rate of Return/100

(iii) Calculate average profit of past years, that is, 3 to 5 years.

(iv) Calculate super profits by deducting required profits from average profits.

(v) Multiply the super profits by the required rate of return multiplier, that is,

Goodwill = Super Profits × 100/Normal Rate of Return

In other words, goodwill is the capitalized value of super profits.

Illustration 21(Goodwill)

Calculate Goodwill if :

(i) The goodwill of a firm is estimated at three years' purchase of the average profits of the last five years which are as follows :

Years:	1998	1999	2000	2001	2002
Profits (Loss):	Rs.10,000	15,000	4,000	(5,000)	6,000

(ii) If in the firm total capital employed is Rs.1,00,000 and normal rate of return is 8%, the average profit for last 5 years is Rs. 12,000 and goodwill is estimated at 3 years' purchase of super profits, remuneration to partners Rs. 3000.

(iii) Rama Brothers earn a net profit of Rs. 30,000 with a capital of Rs. 2,00,000. The normal rate of return in the business is 10%. Use capitalization of super profits method to value the goodwill.

Solution

(i) Total Profit = Rs. 10,000 + 15,000 + 4,000 + 6,000 – 5,000 = Rs. 30,000
Average Profit = Rs. 30,000/5 = Rs. 6,000
Goodwill = Average Profit × 3 = Rs. 6,000 × 3 = Rs. 18,000.

(ii) Average Profit = Rs. 12,000
Remuneration to Partners = Rs. 3,000
Average actual profit = Rs. 12,000 – Rs. 3,000 = Rs. 9,000
Normal Profit = Rs. 1,00,000 × 8/100 = Rs. 8,000
Super Profit = Average Profit – Normal profit = Rs. 9,000 – 8,000
= Rs. 1,000
Goodwill = Super Profit × 3 = 1,000 × 3 = Rs. 3,000

(iii) Normal Profit = Rs. 2,00,000 × 10/100 = Rs. 20,000
Super Profit = Average Profit – Normal Profit = Rs. 30,000 – 20,000
= Rs. 10,000
Goodwill = Super Profit × 100/Normal Rate of Return
= 10,000 × 100/10 = Rs. 1,00,000

4. *Present Value of Super Profits :* Under this method, goodwill is estimated as the present value of the future super profits. This requires following steps :
   (i) Calculate the future super profits for next 5 to 7 years depending upon the business potential.
   (ii) Choose the required rate of return.
   (iii) Calculate present value factors.
   (iv) Multiply present value factors with future super profits.
   (v) The sum of product of present value factors and super profits is the value of goodwill.

Illustration 22 (Goodwill)

A firm has the forecasted profits for the coming 5 years as follows :

Year	I	II	III	IV	V
Profits (Rs.)	1,00,000	1,20,000	90,000	1,00,000	1,50,000

The total assets of the firm are Rs. 10,00,000 and outside liabilities are Rs. 2,00,000. The present value factor at 10% are as follows :

Year	I	II	III	IV	V
PVF	0.9091	0.8264	0.7513	0.6830	0.6209

Calculate the Value of goodwill.

Solution

Year	*I*	*II*	*III*	*IV*	*V*
Profits (Rs.)	1,00,000	1,20,000	90,000	1,00,000	1,50,000
Normal Profit	80,000	80,000	80,000	80,000	80,000
Super Profit	20,000	40,000	10,000	20,000	70,000
PVF	0.9091	0.8264	0.7513	0.6830	0.6209
Present Value of Super Profits	18,182	33,056	7,513	13,660	43,463

Value of Goodwill = Rs. 18,182 + 33,056 + 7,513 + 13,660 + 43,463
= Rs. 1,15,874

1.7 Change in Profit Sharing Ratio

Sometimes, the partners of a firm may agree to change their existing profit sharing ratio. As a result of this, some partners will gain in future profits while others will lose. In such a situation, the partner who gains by the change in the profit sharing ratio must compensate the partner who has made the sacrifice because this effectively amounts to one partner buying the share of profits from another partner. For example, Anu and Benu are partners in a firm sharing profits in the ratio of 3:2. They decide to have an equal share in profits in future. In this case, Anu looses 1/l0th (3/5 – 1/2) share of profits and Benu gains this 1/l0th. Hence, Benu must compensate Anu for her loss in the share of future profits.

The amount of compensation will be equal to the proportionate amount of goodwill. Suppose, the total value of goodwill is ascertained as Rs. 50,000/-, then Benu must pay 1/10 of Rs. 50,000/-, i.e. Rs. 5,000 to Anu. Alternatively, Benu's Capita1 Account be debited by Rs 5,000 and Anu's Capital Account credited with Rs. 5,000. The entry, thus, will be :

Benu's Capital a/c	Dr.	5,000	
Anu's Capital a/c			5,000

Alternatively, if the amount is paid privately by the gaining partner to the other partner, then no entry is made in the books of the firm.

Apart from the payment of compensation for goodwill, the change in profit sharing ratio may also necessitate adjustment in the partners' capital accounts with regard to reserves, revaluation of assets and liabilities, etc. These are similar to those made at the time of the admission or retirement of a partner. All these aspects will be discussed in details in chapter dealing with admission of a partner.

Terms Used in this Chapter

Partnership
Partnership Firm
Partners
Partnership Deed
Partner's Capital Account
Partners Current Account
Profit and Loss Appropriation Account
Profit and Loss Adjustment Account
Goodwill
Super Profit
Average Profit
Capitalized Value of Business
Capital Employed

Summary

1. *Definition of partnership and its essential features*

   "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", is called 'partnership'. 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) The agreement must be for sharing the profits of the business; and (v) It is based on mutual agency relationship amongst the partners.

2. *Meaning and contents of partnership deed*

   A document which contains the terms of partnership as agreed among the partners is called 'Partnership Deed'. It usually contains all mutual rights and obligations of partners, rules relating to the safe custody of books of accounts and other documents, mode of appointment of an auditor, if required, and the rules to be followed in case of admission, retirement, death, dissolution, etc.

3. *Provision of Partnership Act applicable to accounting*

   Normally, a partnership deed includes all mutual rights and duties of partners. But if it is silent in respect of certain aspects, the relevant provisions of the Indian Partnership Act, 1932 become applicable. According to the Partnership Act, the partners share profits equally, no partner is entitled to remuneration, no interest on capital is allowed and no interest on drawings is charged. However, if any partner has given some loan to the firm, he is entitled to interest on such amount @ 6% per annum.

4. *Preparation of capital accounts under fixed and fluctuating capital methods*

   All transactions relating to partners are recorded in their respective capital accounts in the books of the firm. The partners' capital accounts may be maintained according to fluctuating capital method or fixed capital method. Under fluctuating capital method all the transactions relating to a partner are recorded in his capital account itself. But under fixed capital method, the amount of capital remains fixed, the transactions like interest on capital, drawings, interest on drawings, salary, commission, share of profit or loss are not shown in his capital account. They are recorded in a separate account called partner's current account.

5. *Distribution of profit and loss*

   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. It is usually debited with interest on capital and salary/ commission allowed to the partners, and credited with net profit as per Profit and Loss Account and the interest on drawings. The balance being profit or loss is distributed among the partners in the profit sharing ratio and transferred to their respective capital accounts.

6. *Treatment of guarantee of minimum profit to a partner*

   Sometimes, a partner may be guaranteed a minimum amount by way of his share in profits. If, in any year, the share of profits as calculated according to his profit sharing ratio is less than the guaranteed amount, the deficiency is made good by the guaranteeing partners' in the agreed ratio which usually is the profit sharing ratio. If, however, such guarantee has been given by any of them, he or they alone shall bear the amount of deficiency.

7. *Treatment of past adjustments*

   If, after the final accounts have been prepared, some omission or commissions are found in respect of the interest on capital, interest on drawings, partner's salary, commission, etc. the necessary adjustment can be made in the partner's capital accounts through the Profit and Loss Adjustment Account.

8. *Meaning of goodwill and the methods of its valuation*

   Over a period of time, a firm on account of a variety of factors, develop an advantage of name and wide business connections which enable it to earn more profits as compared to a newly set-up business. The value of such advantage is termed as goodwill. In relation to a firm, the valuation of goodwill is needed whenever some change takes place in the constitution of the firm such as admission of a partner, retirement of a partner, etc. There are three methods of calculating value of goodwill viz., purchase of average profits method, purchase of super profits method and capitalization method.

9. *Accounting implication of change in the profit sharing ratio*

   When the partners decide to change their profit sharing ratio, some partners will gain while others will lose. Hence, the gaining partner has to compensate the partner who makes the sacrifice by paying (or through necessary adjustment in their respective capital accounts) the proportionate amount of goodwill.

Questions and Exercises

A. Objective Type Questions

1. State whether each of the following statements is true or false?

   (i) It is compulsory to have a partnership agreement in writing.

   (ii) Under fixed capital method, any addition to capital will be shown in partner's capital account.

   (iii) Interest on money advanced by a partner as loan to the firm shall be paid even if there are losses in the business.

   (iv) Interest on drawings is always calculated for full year on the total drawings.

   (v) The business of the firm can be conducted even by one partner.

   (vi) Change in profit sharing ratio involves almost the same adjustments as those in case of the admission of a new partner.

(vii) Current accounts of partners are maintained under the fluctuating capital method.

(viii) Partners are mutual agents of each other so far as the business of the firm goes.

2. Mohan and Shyam are partners in a firm. State whether the claim is valid if the partnership agreement is silent in the following matters.

   (i) Mohan is an active partner. He wants a salary of Rs 10,000 per year.

   (ii) Shyam had advanced a loan to the firm. He claims interest @ 10% per annum.

   (iii) Mohan has contributed Rs 20,000 and Shyam Rs 50,000 as capital. Mohan wants that the profits be shared equally.

   (iv) Shyam wants interest on capital to be credited @ 6% p.a.

3. *Short Answer Questions*

   (i) Define Partnership Deed?

   (ii) Explain in 50 words why is it considered better to make a partnership agreement in writing?

   (iii) List the items which usually appear on the debit side of a partner's capital account, if the capitals are (i) Fixed, (ii) Fluctuating.

   (iv) Why does the need for valuation of goodwill arise in relation to a partnership firm?

   (v) List the factors which give rise to goodwill.

4. *Essay Type Questions*

   (i) What is partnership? State the chief characteristics of a partnership? Describe the main provisions of the Partnership Act that are relevant to partnership accounts.

   (ii) Distinguish between:

      a) Fixed and Fluctuating methods of capital.

      b) Average Profits and Super Profits.

   (iii) Illustrate how interest on drawings will be calculated under various situations?

   (iv) Define goodwill. Describe various methods of valuing goodwill.

Exercises

5. Raj and Neeraj are partners in a firm. Their capitals as on April I, 2001 were Rs 2,50,000 and Rs 1,50,000, respectively. They share profits equally. On July 1, 2001, they decided that their capitals should be Rs. 2,00,000 each.

The necessary adjustment in the capitals were made by introducing or withdrawing cash. Interest on capital is allowed at 8% p.a. Compute interest on capital for both the partners for the year ending on March 31, 2002.

6. A and B are partners in a firm. They share profits in the ratio of 3:2. As per their partnership agreement, interest on drawings is to be charged @ 10% p.a. Their drawings during 2002 were Rs. 24,000 and Rs. 16,000, respectively.

   Calculate interest on drawings based on the assumption that the amounts withdrawn evenly throughout the year.

7. Hasan is a partner in a firm. He withdraws the following amounts during the year 2002 :

February 1	Rs. 4,000
May 1	Rs. 10,000
June 30	Rs. 4,000
October 31	Rs. 12,000
December 31	Rs. 4,000

   Interest on drawings is to be charged @ 7½ % p.a.

   Calculate the amount of interest to be charged on Hasan's drawings for the year 1989.

8. Menon and Thomas are partners in a firm. They share profits equally. Their monthly drawings are Rs. 2,000 each. Interest on drawings is to be charged @ 10% p.a. Calculate interest on Menon's drawings for the year 1989 assuming drawings are made (i) in the beginning of every month, (ii) in the middle of every month, and (iii) at the end of every month.

9. On March 31, 2003, after the close of books of accounts, the capital account of Ram, Shyam and Mohan showed balance of Rs. 24,000, Rs. 18,000 and Rs.12,000 respectively. But, it was later discovered that interest on capital @ 5% had been omitted. The profit for the year ended March 31, 2003, amounted to Rs. 36,000 and the partners drawings had been Ram Rs. 3,600, Shyam Rs. 4,500 and Mohan Rs. 2,700. The profit sharing ratio of Ram, Syham and Mohan was 3:2:1. Calculate interest on capital.

10. Lokesh and Azad are partners sharing profits in the ratio 3:2 with capitals of Rs. 50,000 and Rs. 30,000 respectively. Interest on capital is agreed @ 6% p.a. Azad is allowed a salary of Rs. 2,500 p.a. During 2002, the profits for the year prior to the calculation of interest on capital but after charging Azad's salary amounted to Rs. 12,500. A provision of 5% of profits is to be made in respect of manager's commission. Prepare an account showing the allocation of profits and partner's capital accounts.

11. Simmi and Sonu are partners in a firm, sharing profits and losses in the ratio of 3:1. The profit and loss account of the firm for the year ending March 31, 1999 shows a net profit of Rs. 1,50,000. Prepare the Profit and Loss Appropriation Account by taking into consideration the following information :

    (i) Partners capital on April 1,1999:
    Simmi — Rs. 30,000: Sonu — Rs. 60,000.

    (ii) Current accounts balances on April 1, 1999:
    Simmi — Rs. 30,000 (cr.) ; Sonu — Rs. 15,000 (cr.)

    (iii) Partners drawings during the year amounted to
    Simmi — Rs. 20,000 ; Sonu — Rs. 15,000.

    (iv) Interest on capital was allowed @ 5%p.a.

    (v) Interest on drawings was to be charged @ 6% p.a. at an average of six months.

    (vi) Partners salaries : Simmi Rs. 12,000 and Sonu Rs. 9,000. Also show the partners current accounts.

12. Ramesh and Suresh were partners in a firm sharing profits in the ratio of their capitals contribted on commencement of business which were Rs. 80,000 and Rs. 60,000 respectively. The firm stared business on April 1,2001. According to the partnership agreement interest on capital and drawings are 12% and 10% p.a. respectively. Ramesh and Suresh are to get a monthly salary of Rs. 2,000 and Rs. 3,000 respectively.

    The profits for year ended March 31, 2002 before making above appropriation was Rs. 1,00,300. The drawings of Ramesh and Suresh were Rs. 40,000 and Rs. 50,000, respectively. Interest on drawings amounted to Rs. 2,000 for Ramesh and Rs 2,500 for Suresh.

    Prepare Profit and Loss Appropriation Account and partners capital accounts assuming that their capitals are fluctuating.

13. Sharma and Verma were partners in a firm. Their partnership agreement provides that,

    (i) Profits shared by Sharma and Verma in the ratio of 3:2.

    (ii) 5% interest is to be allowed on capital.

    (iii) Verma should be paid a monthly salary of Rs. 600.

    The following balances are extracted from the books of the firm on December 31,2002.

	Sharma Rs.	*Verma* Rs.
Capital Accounts	40,000	40,000
Current Accounts	7,200(cr.)	2,800(cr.)
Drawings	10,850	8,150

Net profit for the year, before charging interest on capital and partner's salary was Rs. 9,500. It was found that Verma was regularly drawing his monthly salary. But it was not recorded in drawings account nor debited to the profit and loss account.

Prepare the Profit and Loss Appropriation Account and the Partner's Current Accounts

14. The partnership agreement of Maneesh and Girish provides that
    (i) Profits will be shared equally.
    (ii) Maneesh will be allowed a salary of Rs. 400 p.m.
    (iii) Girish who manages the sales department will be allowed a commission equal to 10% of the net profit after allowing Maneesh's salary.
    (iv) 7% interest will be allowed on partner's fixed capital.
    (v) 5% interest will be charged on partner's annual drawings.
    (vi) The fixed capitals of Maneesh and Girish are Rs. 1,00,000 and Rs. 80,000 respectively. Their annual drawings were Rs. 16,000 and Rs. 14,000 respectively. The net profit for the year ending March 31,2002 amounted to Rs. 40,000.

    Prepare firm's profit and loss Appropriation account.

15. Ram, Raj and George are partners sharing profits in the ratio 5 : 3 : 2. According to the partnership agreement George is to get a minimum amount of Rs .10,000 as his share of profits every year. The net profit for the year 1989 amounted to Rs. 40,000.

    Prepare the Profit and Loss Appropriation Account.

16. Aman, Babita and Suresh are partners in a firm. Their profit sharing ratio is 2:2:1. However, Suresh is guaranteed a minimum amount of Rs. 10,000 as share of profit every year. Any deficiency arising if any, on that account shall be met by Babita. The profits for two years ending December 31, 2000 and 2001 were Rs. 40,000 and Rs. 60,000 respectively.

    Prepare the Profit and Loss Appropriation Account for the two years.

17. On December 31, 2001 the capital accounts of Elvin, Monu and Ahmed after making adjustments for profits, drawings, etc. were as, Elvin — Rs. 80,000, Monu — Rs. 60,000, and Ahmed — Rs. 40,000. Subsequently, it was discovered that interest on capital and interest on drawings had been omitted. The partners were entitled to interest on capital @ 5% p.a. The drawings during

the year were: Elvin — Rs. 20,000: Monu — Rs. 15,000: and Ahmed — Rs. 9,000. Interest on drawings chargeable to the partners was Elvin — Rs. 500, Monu — Rs. 360 and Ahmed — Rs. 200. The net profit during the year amounted to Rs 1,20,000. The profit sharing ratio of the partners was 3:2:1.

Record the necessary adjustment entries for rectifying the above errors of omission. Show your workings.

18. Azad and Benny are equal partners. Their capitals are Rs. 40,000 and Rs. 80,000, respectively. After the accounts for the year have been prepared it is discovered that interest at 5% p.a. as provided in the partnership agreement, has not been credited to the capital accounts before distribution of profits. It is decided to make an adjustment entry at the beginning of the next year.

    Record the necessary journal entry.

19. Goodwill of a firm is to be valued at two years' purchase of three years' average profits. The profits of the last three years were : 2000 — Rs. 30,000, 2001 —Rs. 40,000 and 2002 — Rs. 35,000

    Calculate amount of goodwill.

20. The average net profits expected in future by Girdhari Lal Tankak and Co. are Rs. 30,000 per year. The average capital employed in the business by firm is Rs. 2,00,000. The normal rate of return on the capital employed in similar business is 10%.

    Calculate goodwill of the firm by :

    (a) Super Profit Method on the basis of two year purchase, and

    (b) Capitalization Method.

21. Rajendra and Madhu were partners in a firm sharing profits in the ratio of 5:3. On January 1,2001 they decided that they will share the profits equally in future. The goodwill of the firm was valued at Rs. 60,000. No goodwill appeared in the books.

    Rajendra being the gainer, ascertain the amount of compensation to be made by him to Madhu and state two ways in which it can be adjusted.

22. Chandrakala and Anita were partners in a firm sharing profits in the ratio of 2:1. They decide that with effect from January 1, 2000, they would share profits in the ratio of 3:2. But, this decision was taken after the profits for the year 2000 amounting to Rs. 30,000 has been distributed in the old ratio.

    Goodwill was to be valued at the aggregate of two years profits preceding the date decision became effective. The profits for 1998 and 1999 were Rs. 20,000 and Rs. 25,000, respectively. It was decided that no goodwill would be raised and the necessary adjustment be made through capital accounts which, on

December 31, 2000 stood at Rs. 50,000 for ChandraKala and Rs. 30,000 for Anita.
Record the necessary journal entries.

23. From the following information, calculate the value of goodwill of a firm of Chander and Gupta
    (a) At 3 years purchase of Average Profits.
    (b) At 3 years purchase of Super Profits.
    (c) On the basis of capitalization of Super Profits.
    (d) On the basis of capitalization of Average Profits :
        (i) Average capital employed in the business Rs. 7,00,000.
        (ii) Net Trading results of the firm for the past years -profit 2002 Rs. 1,4,7,600. Loss 2003 Rs. 1,48,100, Profit 2004, Rs. 4,48,700.
        (iii) Rate of interest expected from capital having regard to the risk involved 18%.
        (iv) Remuneration to each partner for his service Rs. 500 p.m.
        (v) Assets (excluding goodwill) Rs. 7,54,762. Liabilities Rs. 31,329.

24. Kothari and Pradeep are partners sharing profits in the ratio of 3:2. They employed Chandan as their manager to whom they paid a salary of Rs. 750 p.m. Chandan deposited Rs. 20,000 on which interest is payable at the rate of 9% p.a. At the end of 2001 (after the division of profit, it was decided that Chandan should be treated as partner w.e.f. Jan1., 1998 with 1/6th share in profits. His deposit being considered as capital carrying interest at 6% p.a. like capital of other partners. Firm's profits after allowing interest on capital were as follows ;

		Rs.
1998	Profit	59,000
1999	Profit	62,000
2000	Loss	(4,000)
2001	Profit	78,000

Record the necessary journal entries to give effect to the above.

25. X , Y, and Z entered into partnership on April 1, 1992. there is no agreement as the sharing-profits except that X guaranteed Z's share of profits after charging interest would not be less than Rs. 7,800 p.a. The initial capital was provided as follows :

X Rs.1,00,000

Y Rs. 60,000

Z Rs. 20,000 (which was increased on 1 Oct.,1993 to Rs. 30,000).

In addition to the above, capital X and Y made temporary loan to the firm as follows : X Rs. 40,000 advanced on March 1,1993 and repaid on Sept.1, 1993. Y Rs. 80,000 advanced on Feb.1, 1993 and repaid on 1 May 1993. The profit for the year ended March 31, 1993 was Rs. 21,000 before providing for interest show the profit and loss appropriation account for the year.

Answers

Objective Type Questions

1. True : (II), (III), (V), (VI) and (VIII) False : (I) (IV) and (VII)
2. (I) not valid (II) not valid (III) valid (IV) not valid.
5. Raj — Rs. 17,000: Neeraj — Rs. 15,000
6. A — Rs. 1,200: B — Rs. 800
7. Rs. 1,075
8. (i) Rs. 1,300; (ii) Rs. 1,200; (iii) Rs. 1,100
9. Interest on capital Ram Rs. 480; Shyam Rs. 525; Mohan Rs. 435
10. Profit as per P and L Appro. a/c Rs. 7,315

    Lokesh's capital a/c balance Rs. 57,389

    Ahmed's capital a/c balance Rs. 37,226
11. Profit : Simmi Rs. 94,163; Sonu Rs. 31,387

    Current Accouunt Balances : Simmi Rs. 11,706
    Sonu Rs. 42,938
12. Share of profit : Ramesh Rs. 16,000; Suresh Rs. 12,000; Balance in Capital Accounts : Ramesh Rs. 87,600; Suresh Rs. 62,700
13. Share of loss : Sharma Rs. 1,020: Verma Rs. 680

    Current Accounts Balances : Sharma Rs. 2500
    Verma Rs. 4200
14. Share of profit : Manish Rs. 10,290
    Ganesh Rs. 10,290
15. Share of Profit : Ram Rs. 18,750
    Rahim Rs. 11,250
    George Rs. 10,000
16. Share of Profit : 2000 Aman Rs. 16,000 :
    Babita Rs. 14,000,
    Suresh Rs. 10,000

    2001 Aman Rs. 24,000 :
    Babita Rs. 24,000
    Suresh Rs. 12,000
17. Adjusted Capital Elvin Rs. 79,430; Debit Elvin with Rs. 570

Account Balances	Monu Rs. 60,010: Credit Monu with Rs. 10 Ahmed Rs. 40,560; Credit Ahmad with Rs. 560

18. Debit Azad and Credit Benns by Rs. 1,000
19. Goodwill — Rs. 70,000
20. Goodwill by Super Profit Method — Rs. 20,000.

    Goodwill by Capitalization Method Rs. 1,00,000.
21. Rajendra is to pay Rs. 7,500 to Madhu. It can be adjusted through cash or by an adjustment entry in their capital accounts — Debit Rajendra's Capital Account and Credit Madhu's Capital Account by Rs. 7,500.
23. Rs. 4,12,200, Rs. 34,200, Rs. 63,333, Rs. 39,900
24. Debit Kothari with Rs. 300

    Debit Pradeep with Rs. 200

    Credit Chandan with Rs. 500.
25. Interest on X's Loan Rs. 1,200

    Interest on Y's loan Rs. 1,200

    Profit X: Rs.4,600, Y: Rs.,6200, Z: Rs.7,800