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SCHOOL OF MANAGEMENT STUDIES

## UNIT-I BRANCH ACCOUNTS

The dictionary meaning of the word branch is any subordinate division of a business, subsidiary shop, office etc. The business concern is often split into many parts or divisions. Such parts may be departments or branches. In case various divisions are located under the same roof or in the same building they are called departments when various divisions of the business are located in different places in the same city or different cities, they are called branches. In such a case the main place of business is known as head office and its subsidiary units are known as branches.

## Definition:

According to the provisions contained in section 29 of the companies Act 1956, it would appear that a branch is any establishment carrying on either the same or substantially the same activity as that carried on by head office of the company.

## Objectives:

A concern establishes branches for the purpose of marketing the products or services. Thus, branches are clearly identifiable profit centers. The major objectives of settings up branch accounts are as follows.

1) To know the profit or loss of cash branch.
2) To know the financial position of each branch.
3) To control the activities of the branch.
4) To find out requirement of goods or cash for each branch.
5) To provide concentrate suggestion for the improvement in the working of different branches.
6) To compare the performance of one branch with the of another branch.
7) To meet the statutory requirements.

## Features:

The followings are the features of branches

1) Branches are units physically separated from the head office.
2) Generally there is only one branch at one place
3) Most of the branches deal in the same type of goods or in the same line of business.
4) Head office makes capital investment for the branches.
5) The whole profit of the branches go to the head office.

## Meaning of Branch :

The term 'Branch Accounts' refer to record of transaction of branches, whether relating to deal with Head Office or with outsiders or deal between different branches in the books of Head office. In order to exercise greater control over the branches, it is necessary to ascertain profit or loss made by such branches separately. For this purpose, a proper accounting system is to be adopted for recording business transactions between Head Office and Branches. The accounting system to be adopted for the branch depends upon the size and nature of branch and the degree of control required by the Head Office. Thus, branches can be broadly classified into two categories for the purpose of recording transactions in the books of accounts.

## HOME BRANCHES

## a) Dependent Branch

Dependent branches are those branches which are keeping their own separate set of books of accounts. The relation between head office and branch is just like agency, therefore, these are also known as agency branches.

## Features

i. The branch does not maintain its own set of books instead the head office maintains record of all transactions in respect of the branch.
ii. Goods are received from the head office. However the outside purchases by branch are not allowed.
iii. Good are often supplied by the head office at cost price. But sometimes they may also be sent it invoice price or loaded price.
iv. All expenses of regular nature are directly paid by the head office through cheques .
v. All petty expenses at branch are paid by the branch manager form the petty cash received in advance form the head office.
vi. Usually branch makes sales on cash basis. But in certain, cases, credit sales may be made
with the authorization from the head office.
vii. Cash received on account of cash sales and from debtors is duly remitted to the head office or deposited with a local bank is in the account of head office.

## Accounting in respect of Dependent Branches:

The accounts of the dependent branches are maintained only in the books of head office hence a branch is required to send returns (daily, weekly or monthly) relating to the translation which have taken place in it as per the instructions of the head office.

Head office on the basis of returns maintains accounts in its books in order to know the profit or loss of each branch for a particular period. Accounting procedure, in case of a dependent branch, the head office may keep accounts of the branch according to the following methods:

1) Debtors system
2) Stock and debtors system
3) Final accounts system
4) Wholesale branch system

## 1. Debtors System:

It is a system of ascertaining the profit made by a head office at a branch by preparing on account known as branch account in the head office book. This system is followed when branches are of small size. Branch account is a nominal account in which all expenses are debited and all incomes are credited. The Excess of the credit over its debit represents a profit or loss, and is transfer to the general profit and loss account of the head office.
From the accounting point of view, the branches may be grouped as under.

1) Branches receive goods from the head office at cost price and sell the monly for cash.
2) Branches receive goods from the head office at cost price and sell them for cash as well as credit.
3) Branches receive goods from the head office at cost plus ascertain percentage of profit and sell both for cash and credit.

## Branches receive goods from the head office and sell them only for cash:-

A branch that sells only for cash is not required to maintain books of accounts. However
it maintains a petty cash book and a copy of the same is forwarded to the head office. It will also forward to the head office. It will also forwarded to the head office a periodical statements in respect of opening stock, closing stock, stock received, sales during the period etc.

The head office prepares branch accounts to ascertain the profit earned by it at the branch. The branch account is debited with the goods supplied, opening stock, remittance to branch for expenses, petty cash remittance etc. The account is credited with the total of cash received form branch in respect of cash sales return by branch to the head office, closing stock etc. The difference in the amount represents the amount of the profit or loss.

## (A) Debtors system (When goods are invoiced at cost):

Branch Account (in the books of head office)

|  |  | Particular S | Rs | Rs |
| :---: | :---: | :---: | :---: | :---: |
| To Balance bld (Assets in the beginning) <br> Stock <br> Debtors <br> Petty cash | Xxx <br> XxxX <br> xxXx <br> xxxx | By Balance bld (opening balance of liabilities account if any) <br> Creditors | $\begin{aligned} & \mathrm{Xx} \\ & \mathrm{x} \\ & \mathrm{xxx} \\ & \hline \end{aligned}$ | Xxx |



[^0]The following journal entries are passed in the books of the Head office for recording the branch transactions.

1) For bringing into account the balances of stock, furniture, petty cash etc, at the commencement of the period (Opening balance of assets)

Branch alc Dr
To Branch stock alc
To Furniture alc
To Branch petty cash alc
2) For brining into account the liabilities at the commencement (Opening balance of liabilities)

Branch liabilities alc Dr
To Branch alc
3) When goods are supplied to branch

## To Goods sent to branch alc

4) When goods are returned by branch

Goods sent to branch alc Dr
To Branch alc
5) When remittance is made to branch forexpenses

Branch alc Dr
To Branch (or) cash alc
6) When cheque or draft is received as remittance form branch

> Bank alc Dr

To Branch alc
7) For bringing into record the items of stock, petty cash, furniture etc at the end of the period (Closing balance)

> Branch asset alc $\quad \mathrm{Dr}$
> To Branch alc
8) For bringing into record the liabilities at the branch at the end of the period

Branch alc Dr
To Branch liabilities alc
9) For transferring the balance of goods sent to branch account

Goods sent to bank alc Dr
To purchase alc (trading concern) (Or)
To trading alc (Manufacturing concern)
10) For profit or loss of the branches) If profit

Branch alc Dr
To general profit and loss alc
b) If loss

General profit and loss alc Dr
To Branch alc

## (B) When goods are invoiced at selling price (i.e., Invoice price method)

Sometimes head office sends goods to branch at invoice price. The invoice price is also termed as selling price (i.e., cost plus some percentage of profit). When the goods are sent at invoice price to the branch, the branch manager will have to sell the goods to the customers at invoice price.

## Objects of sending goods in invoice price

- When head office wishes that its branch manager need not know the exact amount of profit the head office makes, it sends goods to branch at invoice price.
- Stock of branch can be controlled better by sending goods at invoice price. as the goods are supplied to branch at invoice price, (a) opening stock (b) goods sent to branch (c) goods returned by branch and (d) closing stock will be recorded in the branch account at this price. Hence, in order to find out the true profit or loss at branch, it will be necessary to eliminate the loading or profit added and bring down these items to cost level.
- For this purpose, the following adjustment entries are to be made in the branch account:
a) For the profit included in the opening stock

> Stock reserve A/c Dr.

To Branch A/c
b) For profit on net goods sent to Branch (i.e., Goods sent to branch) - Goods returned to H.O.

> Goods sent to Branch A/c Dr.
> To Branch A/c
c) For Profit included in the closing stock

Branch A/c Dr.
To Stock reserve A/c
The closing stock reserve at the end of each year will be carried forward to the next year for being transferred to the branch account as shown in the item (a) above. In the head office balance sheet, branch closing stock less closing stock reserve in shown on the assets side.

## Stock and Debtors system (Analytical method)

Stock and debtors system is an alternative method to find out the profit or loss made at the branch this method is useful only when goods are invoiced to the branch at the selling price which the branch is not entitled to vary. Hence, one of the main advantages of this system is that the head office can know in advance the amount of profit that is may get from the branch. In this method, the head office keeps separate accounts relating to various types of transactions at the branch instead of one branch account. The following accounts are kept in the head office books relating to a branch under this system

## 1) Branch stock account

Branch stock account is maintained to record the transactions of goods at invoice price. It is a practical means of controlling the stock at branch. All transaction which leads to increase in branch stock are debited to the account, and all those which reduce stock at branch are credited to it. However this account will not disclose profit or loss, but discloses shortage, surplus or closing stock of goods.

The items to be debited in the branch stock account are opening stock at branch, goods sent to branch, return by customers to branch, transfer from another branch, surplus found in stock etc. But the items such a cash sales credit sales, return by branch to the head office goods transferred to another branch, spoilage and closing stock etc are to be credited in this account. In case the closing stock is not given, the balancing figures of branches stock account is the closing stock. After recording usual items and closing stock, if both sides of the account do not tally, the difference is either surplus (Credit side is higher) or spoilage (debit side is higher).
2)Branch debtors account :

Branch debtors account is maintained to keeps the transactions relating to branch debtors. This account is similar to the one prepared under debtors system. But discount allowed and bad debts are debited in branch expenses account while entering them in branch debtors account.

## 3)Branch Expenses account:

This account discloses all branch expenses and losses incurred by the branch. The total of expenses on the debit side of the account is later transferred to the branch profit and loss account. Incase no separate branch profit and loss account is maintained; branch expenses account is closed by transferring the balance to branch adjustment account.
4) Branch Adjustment account:

An account which is prepared to ascertain the gross profit if the branch is termed as branch adjustment account. Branch adjustment account summarizes the profit (loading) on all transactions. This account is credited with the stock reserve on opening stock and loading on net goods sent to branch and loading on surplus in stock. But the items such as loading on shortages in -stock, spoilage, pilferage, theft, loss by fire, loss-in transit and stock reserve on closing stock are shown, on the debit side of this account. The balance if any of the branch adjustment account is transferred to branch profit and loss account.

## 5)Branch profit and loss account:

This account is prepared to find out the net profit (as ascertained form the branch adjustment account) and the cost of surplus in stock are shown on the credit side of this account. But the items such as branch expenses and the cost of shortage in stock, pilferage that etc, are shown on the debit side of this account. In case, the credit side exceeds over the debit side, the excess represents net profit and vice versa.
6) Goods sent to branch account :

Goods sent to branch account is prepared to know the goods supplied to and returns received from the branch the preparation of this account is in the same manner as in the case of debtors system. But the loading in the account is transferred to the branch adjustment account.

## 7)Branch cash account :

The branch cash account reveals all the cash transactions with the branch. This account is usually opened where the branch is allowed to hold cash received from debtors and use it for branch expenses, and remits the balance to head office after certain interval Branch cash account is debited with the opening balance of cash, the cash being remitted by the head office to the branch and collected from the debtors. This account is credited with the branch expenses and amount remitted to the head office or other branches. The balance of this account represents the closing cash lying with the branch.

## 8)Fixed asset account ;

Usually the head office maintains separate asset accounts for each and every fixed asset. This account is debited with the opening value of asset and purchase if any of the asset. But this account is credited with the depreciation provided on the asset. The balance of this account is the closing value of the asset.

## 9)Branch stock account :

The branch stock reserve account begins with credit balance representing the loading in the opening stock. This sum is transferred to the credit of branch adjustment account to arrive at the true profit. The entry would be

$$
\begin{gathered}
\text { Stock reserve alc Dr } \\
\text { To branch adjustment alc }
\end{gathered}
$$

But the loading in the closing stock is debited in the branch adjustment account. The entry would be

Branch adjustment alc Dr
To stock reserve alc

Journal entries under stock and debtors systems

1. Goods supplied to branch

Branch alc Dr.
To goods supplied to branch alc
2. Cash sales made at branch

Cash/bank alc Dr.
To branch stock alc
3. Credit sales made at branch

Branch debtors alc Dr.
To branch stock alc
4. Goods returned to head office by branch

Goods sent to branch alc Dr.
To branch stock alc
5. Goods received from other branches

Branch stock alc Dr.

To goods sent to branch alc
6. Goods transferred to other branches

Goods sent to branch alc Dr.
To branch alc
7. Cash received from branch debtors

Bank/cash alc Dr.
To branch debtors alc
8. Goods returned by branch debtors

Stock branch alc Dr.
To branch debtors alc
9. Branch expenses paid by the heads office

Branch expenses alc Dr.
To bank/cash alc
10. On transferring branch expenses

Branch adjustment alc Dr.
To branch expenses alc
11. Discount allowed, bad debts written off, allowances etc., to debtors

Branch expenses alc Dr.
To cash /bank alc
12. Goods damaged/destroyed by fire

Defective goods alc Dr.
To branch stock alc
13. Disposing of damaged goods

Branch adjustment alc Dr. (Loading in such goods)
Branch profit and loss alc Dr. (Cost price of such goods)
To damaged goods alc
14. Loading in the stock at branch including stock in transit at the beginning Stock reserve alc Dr.

To branch adjustment alc
15. Loading in the net amount of goods sent to branch

Goods sent to branch alc Dr.

To branch adjustment alc
(Net amount of goods implies goods sent by the head office to branch plus goods received from other branches minus goods transferred to other branches minus goods returned to the head office)
16. Loading in closing stock including stock in transit at the end.

Branch adjustment alc Dr.
To branch profit\& loss alc
17. Transferring gross profit from the branch adjustment account to the branch profit and loss account

Branch adjustment alc Dr.
To branch profit and loss alc
18. Transferring branch expenses account to branch profit and loss accounts

Branch profit and loss alc Dr.
To branch expenses alc
19. Closing the goods sent to branch alc

Goods sent to branch alc Dr.
To trading/purchasing alc
20. Transferring net profit

Branch profit and loss alc Dr.
To general profit and loss alc
21. Transferring net loss

General profit and loss alc Dr.
To branch profit and loss alc
In the case of trading concerns goods sent to branch account is closed by transferring it to purchase account. But in the case of manufacturing concerns, the same is transferred to the trading account.

## Shortage in stock

After recording closing stock and all other items in the branch stock account if it is credit side is less than thedebit side, the difference is known as shortage. It may be due to spoilage, leakage, sale in small quantity etc.

Loading in shortage in stock should be charged to branch adjustment account and the cost of such goods should be charged to branch profit and loss account. The journal entries would be

1. Loading in shortage

Branch adjustment alc Dr.
To branch stock alc

## 2. Cost of shortage

Branch profit and loss alc Dr.
To branch stock alc
11) Pilferage and Theft

Since pilferage is very common is retail trade, it should be treated as a normal business loss. The loading of such good is charged to branch adjustment account. But the cost of its is charged go the branch profit and loss account.

The journal entries for recording pilferage are the same as in shortage in stock.
12) Surplus stock

Even after recording closing stock and all other items in the branch stock accounts, if its debit side is less than the credit side, the difference should be treated as surplus. The loading on surplus in stock is credited to branch adjustment account. But the cost of such goods is credited to branch profit and loss account. The Journal entries would be
a) Loading in surplus

Branch Stock alc Dr.
To branch adjustment alc
b) Cost of surplus

Branch stock alc Dr.
To branch profit and loss alc
13) Loss by fire and accidents

It is totally abnormal loss, thus, loading on such a loss should be charged so the branch adjustment account and its cost should be charged to the general profit and loss account.

## 3. Final account system

The profit or loss of a dependent branch can also be ascertained by preparing a trading and profit and loss account, also known as memorandum trading and profit and loss account. Thus, opening stock, goods sent to branch goods returned by branch, closing stock at branch etc are recorded only at cost prices and not at invoice price.

Besides the final accounts, branch account is also to be prepared under this system; however this branch account is different from the branch account prepared under the debtors system. The branch account appearing under the debtors system is a nominal account. But the branch account, appearing under final account system, is a personal account and generally will have debit balance.

## 4. Wholesale branch system

Now -a-days a manufacturing concern sells goods to the consumers both through the wholesaler and its own retail branches. Usually wholesale price is less than the retail price. Therefore, the manufacturing can earn more profit by running his own retail branches. But for ascertaining the true profit of retail business the cost of running the retail branch should also be taken into account. Under this situation, to ascertain the true profit earned by a branch, the head office charges the branch with wholesale price. The difference between the wholesale price and selling price is the pure profit on retailing.

Under the wholesale branch system the head office sends the goods to the branch at wholesale price and not at cost. So, the goods sent to branches should be credited at wholesale price in the head office trading account. Further the stock at the end of the year at the branch should also be valued at wholesale price. Thus, the head office should create a proper reserve by debiting its own profit and loss account to show the branch stock at cost in the balance sheet.

## II) INDEPENDENT BRANCH

A branch which enjoys a good amount of freedom is known as independent branches. Independent branches makes purchase from outside, get goods from the head office supply goods to the head office, and fix the selling price by itself. So, it is aptly said that an independent branch is like an American son, but a dependent branch is like a minor son. Independent branches maintain complete set of account and prepare their own trail balance trading and profit and loss account and balance sheet. Such branches prepare head office account in their books to record the transactions with the head office. A head office account prepared by an independent branch is purely a personal account. It discloses the balance due to or from the head office.

## FOREIGN BRANCHES

The accounting principles which apply to a home branch (i.e. inland branch) also apply to a foreign branch in the home currency. Manner of converting the trial balance of foreign branch
A) In case of fairly stable currency, all the balances except the following, contained in the trial balance may be converted at a fixed rate.
(i) Remittances will be converted at the actual rates at which they were affected.
(ii) The balance in the head office account in the branch books will be converted at the equivalent amount appearing
(iii) The branch account in the head office books
(iv) Goods from the head office to branch will be converted at value appearing in the home currency is the head office books.
B) In other cases the various items in the branch trial balance maybe converted as under

| ITEM |  | Basis of conversion |
| :--- | :--- | :--- |
| a. | Fixed assets | At the rate when they were purchased <br> subject to |
| b. | Fixed liabilities | At the rate when they were undertaken |
| c. | Opening current assets and current | At the rate prevalent on the date of opening |
| d. | Closing current assets and current | At the rate prevalent on the date of opening |
| e. | Revenue items <br> (i) $\quad$ Depreciation <br> (ii) $\quad$Provision for bad and <br> doubtful debts <br> Opening stock | At the rate applicable to the concerned asset At <br> the rate applicable to the concerned debtors <br> At the rate prevalent at the |
| f. | Goods sent to received from branch | At the figure appearing in H.O books |
| g. | BALANCE IN H.O account in the | At the figure as appearing in branch account |
| h. | Remittance during the year | At the original actual rates. |

## Dependent branches

## Debtors system

a) When goods are sent to branch at cost price

## Problem No: 1

Loyal Shoe Company opened a branch at madras on 1-1-2006. From the following prepare the madras branch account for the years 2006to 2007.

|  | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| :--- | ---: | ---: |
| Goods sent to madras branch | 15000 | 45000 |
| Cash sent to branch for :- |  |  |
| Rent | 1800 | 1800 |
| Salaries | 3000 | 5000 |
| Other expenses | 1200 | 1600 |
| Cash received from the branch | 24000 | 60000 |
| Stock on 31 ${ }^{\text {st }}$ December | 2300 | 5800 |
| Petty cash in hand on 31 ${ }^{\text {st }}$ Dec. | 40 | 30 |

## Solution:

## In the Books of Head Office



Madras Branch A/c for 2007

| Jan. 1 | To Balance b/d |  | Rs. | 31 Dec. | By Cash | Rs. <br> 60,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stock |  | 2,300 |  |  |  |
|  | Petty Cash |  | 40 |  |  |  |
|  | To Good sent to Branch |  | 45,000 |  | By Balance c/d |  |
|  | To Cash: |  |  |  | Stock | 5,800 |
|  | Rent | 1,800 |  |  | Petty cash | 30 |
|  | Salaries | 5,000 |  |  |  |  |
|  | Other expenses | 1,600 | 8,400 |  |  |  |
|  | To General P\&L (Profit) |  | 10,830 |  |  |  |
|  |  |  | 65,830 |  |  | 65,830 |

## ProblemNo:2

The Kanpur shoe company opened a branch at Delhi in 198. From the following particulars prepare Delhi branch account for the year 1998.

| Goods sent to branch | 15000 |
| :--- | :--- |
| Cash sent to branch for expenses | 6000 |
| Cash received from the branch | 24000 |
| Stock on 31-12-1998 | 2300 |
| Petty cash in hand | 40 |

## Problem No: 3

## Maintain petty cash balance under Imprest system

A head office invoices goods to its branch at cost price. The branch is permitted to incur petty expenses and maintain petty cash balance of Rs. 1000 on the impress system. It is also permitted to buy furniture of the value of Rs.2000.

| Stock 1-1-2003 | 41000 | Cash purchase by the branch( |  |
| :--- | :--- | :--- | :--- |
| Debtors 1-1-2003 | 12500 | with H.O permission) | 12500 |
| Petty cash 1-1-2003 | 1000 | Payment to creditors | 45000 |
| Creditors 1-1-2003 | 10000 | Closing balance of creditors alc | 27500 |
| Rent upto 31-3-03 | 250 | Payment by H.O |  |
| Goods sent to branch | 75000 | Rent for one year (Paid on 1.1.2003) | 1200 |
| Credit Sales | 40000 | Salaries | 6000 |
| Cash Sales | 75000 | Insurance (paid upto 31.3.2004) | 750 |
| Cash received from debtors | 45000 | Payment by Branch |  |
| Allowances | 50 | Furniture | 2,000 |
| Discount | 100 | Petty expenses | 250 |
| Bad debts | 150 | Stock on 31.12.2003 | 100000 |

Prepare branch account in the books of H.O.

## Solution:

In the Books of H.O.

## Branch A/c

| $\begin{aligned} & \hline 2003 \\ & \text { Jan. } 1 \end{aligned}$ | To Balance b/d Stock <br> Debtors <br> Petty Cash |  | Rs. <br> 41,000 <br> 12,500 <br> 1,000 <br>  <br> 250 <br> 75,000 <br>  <br>  <br>  <br>  <br> 7,950 <br> 250 <br>  <br>  <br>  <br>  <br>  | 2003 |  | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Jan. 1 | By Balance b/d Creditor | 10,000 |
|  |  |  |  |  | By Bank: |  |
|  |  |  |  |  | Cash remitted to H.O | 60,250 |
|  | Rent Prepaid |  |  |  |  |  |
|  | To Good sent to Branch |  |  |  | By Balance c/d |  |
|  | To Bank: |  |  |  | Stock | 1,00,000 |
|  | Rent | 1,200 |  |  | Debtors | 7,200 |
|  | Salaries | 6,000 |  |  | Petty Cash | 1,000 |
|  | Insurance | 750 |  |  | Furniture | 2,000 |
|  | To Petty expenses |  |  |  | Rent Prepaid(1200*3/12) | 300 |
| $\begin{aligned} & \text { Dec. } \\ & 31 \end{aligned}$ | To Balance c/d Creditors <br> To General P\&L <br> A/c (Profit) | $\begin{array}{r} 27,500 \\ 15,487.50 \end{array}$ |  |  |  |  |
|  |  |  |  |  | Insurance prepaid (750*3/12) | 187.50 |
|  |  |  |  |  |  | 1,80,937.50 |

Note: Petty cash spent by branch is adjusted from branch cash and H.O. has not sent money for it.

## Working Note:

## Branch Debtors A/c

|  | Rs. |  | Rs. |
| :--- | ---: | ---: | ---: |
| To Balance b/d | 12,500 | By Cash | 45,000 |
| To Sales (Credit) | 40,000 | By Allowances | 50 |
|  |  | By Discount | 100 |
|  |  | By bad debt | 150 |
|  |  | By Balance c/d | 7,200 |
|  |  | (Bal.fig) |  |
|  | 52,500 |  | 52,500 |

## Branch Cash A/c

|  | Rs. |  |  |
| :--- | :--- | ---: | ---: |
| To Sales (cash) | 75,000 | By Petty Cash | Rs. |
| To Sales (Credit) | 40,000 | By Cash Purchases | 12,500 |
|  |  | By Creditor | 45,000 |
|  |  | By Furniture | 2,000 |
|  |  | By Remittance to | 60,250 |
|  |  | H.O. (Bal.fig) |  |
|  |  |  | $1,20,000$ |
|  |  | $1,20,000$ |  |
|  |  |  |  |

## Branch Petty Cash A/c

|  | Rs. |  |  | Rs. |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| To Balance b/d |  | 1,000 |  | By Expenses | 250 |
| To Cash (Bal.fig) |  | 250 |  | By Balance c/d | 1,000 |
|  |  | 1,250 |  | 1,250 |  |

## When goods are sent to branch at invoice price

## Problem No: 4

A madras head office has a branch at Salem to which goods are invoiced at cost plus 20\%. From the following particulars, prepare Branch $\mathrm{A} / \mathrm{c}$ in the H.O. books:

| Goods sent to branch | 211872 |
| :--- | :--- |
| Total sales | 206400 |
| Cash sales | 110400 |
| Cash received from branch debtors | 88000 |
| Branch debtors on 1-1-2011 | 24000 |
| Branch stock on 1-1-2011 | 7680 |
| Branch stock on 31-12-2011 | 13440 |

## Solution:

In the books of head office
Salem Branch A/c for the year ended 31-12-2011

| To Balance b/d | Rs. <br> Stock | By Bank: <br> Debtors | 24,680 | Cash sales <br> Cash received from |
| :--- | ---: | :--- | ---: | ---: |
| To Good sent to | $2,11,872$ | debtors <br> By Stock reserve (7,680 <br> *20/120) | 88,000 | $1,98,400$ |
| Branch | 2,240 | By Good sent to branch: |  | 1,280 |
| To Stock reserve |  |  | 35,312 |  |



Working Note: Calculation of closing debtors

|  | Rs. |  | Rs. |
| :--- | :--- | :--- | :--- |
| To Balance b/d | 24,000 | By Cash <br> To Sales (Credit) | 96,000 |
| By Balance c/d <br> $(2,06,400-$ <br> $1,10,400)$ | 88,000 <br> (bal.fig) | 32,000 |  |

## Stock and debtors system

## When goods sent at cost price

## Problem No:-5

The Calcutta commercial company invoiced goods to its Jamshedpur branch at cost. The head office paid all the branch expenses form the bank except petty cash expenses which were paid by the branch. Form the following details relating to the branch, prepare.

1) Branch stock alc
2) Branch debtors alc
3) Branch expenses alc
4) Branch P\&L alc

| Stock (opening) | 21000 | Stock (closing) | 19500 |
| :--- | :--- | :--- | :--- |
| Debtors (opening) | 37800 | Allowances to customer | 600 |
| Petty cash (opening) | 600 | Discount to customers | 4200 |
| Goods sent from H.O | 78000 | Bad debts | 1800 |
| Goods returned to H.O | 3000 | Goods returned by customers to branch | 1500 |
| Cash sales | 52500 | Salaries and wages | 1860 |
| Advertisement | 2400 | Rent and rates | 3600 |
| Cash received from | 85500 | Debtors (closing) | 29400 |
|  |  | Petty cash (closing) | 300 |
|  | Credit sales | 85200 |  |

Branch Stock A/c

|  | Rs. |  | Rs. |
| :--- | :--- | :--- | :--- |
| To Balance b/d | 21,000 | By Cash | 52,500 |
| To Goods sent to branch | 78,000 | By Good sent to Branch | 3,000 |


| To Branch Debtors | 1,500 | By Branch Debtors | 85,200 |
| :--- | :--- | :--- | :--- |
| To Branch P\&L A/c (Transfer) | 59,700 | By Balance c/d | 19,500 |
|  | $1,60,200$ |  | $1,60,200$ |

## Branch Debtors A/c

|  | Rs. |  | Rs. |
| :--- | :--- | :--- | :--- | :--- |
| To Balance b/d | 37,800 | By Cash | 85,500 |
| To Branch Stock A/c |  |  |  |
| (Credit sales) |  |  |  |

## Branch Expenses A/c

| To Branch Debtors A/c | Rs. 6,600 | By Branch P\&L A/c | Rs. $31,500$ |
| :---: | :---: | :---: | :---: |
| To Bank (Advt +Salaries\&wages+Rent \& Rates) | $24,600$ |  |  |
| To Petty expenses | 300 |  |  |
|  | 31,500 |  | 31,500 |

Branch Profit and Loss A/c

|  |  | Rs. |  | Rs. |
| :--- | :--- | :--- | :--- | :--- |
| To Branch Expenses A/c |  | 31,500 | By Branch Stock A/c | 59,700 |
| To General P\&L A/c <br> (bal.fig) | (Profit) | 28,200 |  |  |
|  |  | 59,700 |  | 59,700 |

## When goods sent at invoice price

## Problem No. 6

P.O. Ltd. Calcutta, started a branch in Bombay on $1^{\text {st }}$ April, 1983 to which goods were sent at $20 \%$ above cost. The branch does not maintain double entry books of account and necessary accounts relating to branch are maintained in H.O. Following further details are given for year ended on $31^{\text {st }}$ March, 1984

| Cost of goods sent to Branch | 50,000 |
| :--- | ---: |
| Goods received by Branch till $31^{\text {st }}$ March, 1984 at invoice price | 54,000 |
| Credit sales for the year | 58,000 |
| Debtors as on $31^{\text {st }}$ March, 1984 | 20,800 |
| Bed Debts and Discount written off | 200 |


| Cash remitted to H. O. | 43,000 |
| :--- | ---: |
| Cash in hand at Branch on $31^{\text {st }}$ March, 1984 | 2,000 |
| Cash remitted by H.O. to Branch during the year | 3,000 |
| Closing stock at Branch (at invoice price) | 6,000 |
| Expenses incurred at Branch | 12,000 |

Determine the Profit or Loss of the Branch for the year ended on $31^{\text {st }}$ March, 1984, according to Stock and Debtors system in the books of the Head Office.

## Solution

## Branch Stock A/c

| Particulars |  |  | Particulars |
| :--- | :---: | :--- | :---: |
| To GST Branch A/c |  |  |  |
| To Branch Adj A/c (b/f) (sales above | 60,000 | By Branch Debtors A/c | 58,000 |
| invoice | 27,000 | By Branch cash a/c | 17,000 |
| price) |  | By balance c/d(60,000- <br> $544,000)$ <br> By stock in hand | 6,000 |
|  |  | $\mathbf{8 7 0 0 0 0}$ |  |

Branch Debtors A/c

| Particulars | ` | Particulars | - |
| :--- | :---: | :--- | :---: |
| To b/d | XX | By Branch (B. debts \& dis) | 27,000 |
| To Branch Stock A/c | 58,000 | By Branch cash A/c b/f | 20,800 |
|  |  | By balance c/d | $\mathbf{5 8 0 0 0}$ |

Branch Adjustment A/c

| Particulars |  |  |  |  | Particulars | - |
| :--- | ---: | :--- | :---: | :---: | :---: | :---: |
| To Stock reserve (clos) | 2000 | By Branch Stock A/c | 27,000 |  |  |  |
| To G.P. transfer to Branch P/L | 35,000 | By Goods sent to Branch | 10,000 |  |  |  |
|  | $\mathbf{3 7 , 0 0 0}$ |  | $\mathbf{3 7 0 0 0}$ |  |  |  |

Branch P/L A/c

| Particulars | - | Particulars | - |
| :--- | :---: | :--- | :---: |
| To Branch cash a/c (exp) | 12,000 | By G.P. | 35,000 |
| To Branch bad debts | 200 |  |  |
| Net profit transfer to General P/L | 22,800 |  | $\mathbf{3 5 , 0 0 0}$ |
|  | $\mathbf{3 5 , 0 0 0}$ |  |  |

Branch Cash A/c

| Particulars | - | Particulars | - |
| :--- | :---: | :--- | :---: |
| To b/d | xx | By Cash A/c (remitted) | 43,000 |
| To Branch Debtors A/c | 37,000 | By Branch expenses | 12,000 |
| To H.O Cash A/c | 3,000 | By Bal. c/d | 2000 |
| To Branch Stock A/c (Cash sales (b/f) | 17,000 |  |  |
|  | $\mathbf{5 7 , 0 0 0}$ |  | $\mathbf{5 7 , 0 0 0}$ |

## Goods sent to Branch A/c

| Particulars | ` | Particulars | - |
| :--- | ---: | :--- | :---: |
| To Shop stock (100\%) | 50,000 | By Branch Stock A/c (120\%) | 60,000 |
| To Branch Adjusted A/c 20\% | 10,000 |  |  |
|  | $\mathbf{6 0 , 0 0 0}$ |  | $\mathbf{6 0 , 0 0 0}$ |

## III Final account system

## Problem No: 7

A madras merchant has a branch at pudukkottai to which goods are sent at cost plus $25 \%$ the branch keeps its own sales ledger and remits all cash received to the head office every day. All expenses are paid from the head office. The transactions for the branch were as follows.
Prepare the branch trading and profit and loss account and branch account for the year 1994.

| Stock (1.1.94) at IP | 11000 | Cheques sent to branch |  |
| :--- | :--- | :--- | :--- |
| Debtors (1.1.94) | 100 | Rent | 600 |
| Petty cash (1.1.94) | 100 | wages | 200 |
| Cash sales | 2650 | salary | 900 |
| Credit sales | 23950 | Stock (31.12.94) at IP | 13000 |
| Goods sent to branch at IP | 20000 | Debtors (31.12.94) | 2000 |
| Goods returned to head office | 300 | Petty cash (31.12.94) | 125 |
| Allowances to customers | 250 | (including miscellaneous income | 21000 |
| Return inwards | 500 |  |  |

Branch Trading and Profit and Loss A/c for the year ending 31.12.94


Branch A/c (Personal A/c)

| To Balance b/dStock | Rs. | By Bank: | 2,650 | Rs. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | 8,800 | Cash sales |  |  |
| Debtors | 100 | Cash received from debtors | 21,000 |  |
| Petty cash | 100 |  |  | 23,650 |
| To Good sent to |  | By Goods sent to branch |  | 240 |
| Branch at cost | 16,000 | at cost (return) |  |  |
| To Bank (expenses) | 1,700 |  |  |  |
| To Profit | 9,715 | By Balance c/d $(10,400+2,000+125)$ |  | 12,525 |
|  | 36,415 |  |  | 36,415 |

## IV Whole sales branch system

Problem No: 8
The head office of a company sends goods to its branch at $20 \%$ less than the list price. Goods are sold to consumers at cost plus $100 \%$. From the following particulars, ascertain the profit made at the head office and the branch office on wholesale basis.

| Particulars | Head office | Branch office |
| :--- | :--- | :--- |
| Purchase | $2,00,000$ | - |
| Goods sent to branch (invoice | 80,000 | - |
| Sales | $1,70,000$ | 80,000 |

Solution:

|  | H.O | Branch |  | H.O | Branch |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Purchases <br> To Goods received from H.O <br> To Gross Proft c/d | 2,00,000 | - | By Sales <br> By Goods sent to branch By Closing stock | 1,70,000 | 80,000 |
|  |  | 80,00 |  | 80,000 |  |
|  | 1,15,000 | 16,000 |  | 65,000 | 16,000 |
|  | 3,15,000 | 96,000 |  | 3,15,000 | 96,000 |
| To stock reserve (Closing stock) (16,000 * 60/160) <br> To Net Profit c/d | $6,000$ | 16,000 | By Gross Profit b/d | 1,15,000 | 16,000 |
|  | $\begin{array}{\|l\|} \hline 1,09,000 \\ \hline 1,15,000 \\ \hline \end{array}$ | 16,000 16,000 |  | 1,15,000 | 16,000 |

## Working Notes:

## Calculation of Closing Stock

|  | Value of Closing Stock at H.O. Purchase | Rs. | $\begin{aligned} & \hline \text { Rs. } \\ & 2,00,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Less: | Cost of goods sold (1,70,000/200 * 100) | 85,000 |  |
| Less: | Cost of Good sent to Branch ( $80,000 / 160$ * 100) Closing Stock Value of closing stock at branch: | 50,000 | 1,35,000 |
|  |  |  | 65,000 |
|  | Value of closing stock at branch: Goods received from H.O. |  | 80,000 |
| Less: | Cost of goods sold (80,000/200 * 160) |  | 64,000 |
|  | Closing Stock |  | 16,000 |

## Note:

H.O. Cost Price

| Whole sale rate | List Price |
| :--- | :--- |
| i.e., Rate at which Goods | $200(100+100)$ |
| supplied to branch |  |
| $160(200-200 * 20 \%)$ |  |

## QUESTIONS

SECTION -A

1. What do you mean by Branch Accounting?
2. What is Dependent Branch?
3. Write short note on Debtors system
4. What is stock and Debtors system?
5. State the meaning of Independent Branch.
6. What is Petty cash?
7. Write a short notes on Whole sale Branch system.
8. What is good in transit?
9. From the following particulars, calculate closing branch debtors balance: Branch Debtors (1-1-2012) Rs. 6,300

Credit Sales
Rs. 39,000
Cash received from debtors Rs. 41,200
10. The Kanpur Shoe Company opened a branch Delhi in 2012. From the following particulars

Prepare Delhi Branch Account for the year 2012.
Rs
. Goods sent to branch
15,000
Cash sent to branch for expenses 6,000
Cash received fr0m the branch 24,000
Stock on 31-12-2012 2,300
Petty Cash in hand 40

## SECTION - B

1. Explain the various types of Branches.
2. What are the objective of Branch Accounting?
3. What are features of Dependent Branch?
4. Explain the procedure to maintain account of a branch under Stock and Debtors system.
5. Layal shoe Company opened a branch at Chennai on 1-1-2011. From the following particulars, the Chennai

Branch account for the years 2011 and 2012.

|  | $2011(\mathrm{Rs})$ | 2012(Rs) |
| :--- | :--- | :--- |
| Good sent to Chennai Branch | 15,000 | 45,000 |
| Cash sent to Branch for |  |  |
| Rent | 1,800 | 1,800 |
| Salaries | 3,000 | 5,000 |
| Other expenses | 1,200 | 1,600 |

6. Indian Traders, Bombay opened a branch at Baroda on 1-1-2012. The following information is available in respect of the branch for the year 2012.

|  | Rs. |
| :--- | :---: |
| Goods sent to branch | 75,000 |
| Cash sales at branch | 50,000 |
| Credit sales at the branch | 60,000 |
| Salaries of the branch staff paid by head office | 15,000 |
| Office expenses of the branch paid by H.O | 12,000 |
| Cash remittance to branch towards petty cash | 6,000 |
| Petty cash on 31.12.2012 | 500 |
| Debtors on 31.12.2012 | 5,000 |
| Stock on 31.12.2012 | 27,000 |

Prepare Branch Account to show the profit or loss from the branch for the year 2012.
7. The following information relates to Madurai branch

|  | Rs. | Rs. |
| :--- | :---: | :---: |
| Stock on 1-1-2012 |  | 11,200 |
| Branch debtors on 1-1-2012 |  | 6,300 |
| Goods sent to Branch |  | 51,000 |
| Cash sent to Branch for : <br> Rent | 1,50 |  |


| Sales at branch: <br> Cash | 25,000 |  |
| :--- | :--- | :--- |
| Cash received from debtors |  | 41,200 |
| Stock on 31-12-2012 |  | 13,600 |

Prepare Branch Account for the year 2012.
8. A Chennai head office has a branch at Salem to which goods are invoiced at cost plus $20 \%$.

## From

The following particulars, prepare Branch account in the head office books.

|  | Rs. |
| :--- | :---: |
| Goods sent to branch | $2,11,872$ |
| Total sales | $2,06,400$ |
| Cash sales | $1,10,400$ |
| Cash received from Branch debtors | 88,000 |
| Branch debtors on 31-12-2012 | 24,000 |
| Branch stock on 31-12-2012 | 7,680 |
| Branch stock on 31-12-2012 | 13,440 |

9. Sun \& Co. has a branch in Truchi and the transactions of the branch for the year ended 31-12- 2012 were:

|  | Rs |
| :--- | :---: |
| Stock of goods at Branch 1-1-2012 (invoice price) | 9,200 |
| Goods sent to branch (invoice price) | 68,400 |
| Salaries and wages | 3,720 |
| Gross cash sales by branch | 68,550 |
| Taxes and insurance | 880 |
| Rent | 1,450 |
| Sundry expenses | 390 |
| Stock of goods as at 31-12-2012 (invoice) | 8,950 |

The branch sales are exclusively for cash and the goods sent to branch have been invoice at $33.33 \%$ on cost. You are required to prepare the Branch account, assuming that all cash sales Proceeds are remitted to $\mathrm{H} . \mathrm{O}$ and all expenses of the branches are separated from H.O.

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SCHOOL OF MANAGEMENT STUDIES

## UNIT II: DEPARTMENTAL ACCOUNTS

## Department

Department is a division or unit established by the parent organization to achieve a common and specified operational functions. Each department is individually responsible to its profit or loss

## Departmental accounting

Departmental accounts are set of accounts prepared to measure each department or division's operational performance and trading results. These are prepared at any given time to measure the earning capacity and find the operational leakage.

## Advantages of departmental accounting

- It helps to make sure whether the department makes profit or suffers a loss.
- It makes the management to compare the departments each other to take corrective actions.
- It helps to take a decision of further investment or disinvestment based on the results of each department.
- It helps to reward the manager of each department with incentives and remuneration.
- The trading results of each department may help to evaluation the performance of each department. The sales of that department which gives maximum profit may be pushed up by special efforts.
- The profitability of each department may help the management for taking decision whether to drop a department or add a new one.
- The growth potentials of a department can be evaluation by having comparison with the other departments.
- The users of accounting information can be provided more detailed information like the shareholders, investors, creditors, etc.
- The overall profits of the organization can be increased by having friendly rivalries between different departments.
- The departmental managers and staff can be suitably rewarded on the basis of the departmental result.
- It helps the management to determine the justification of proper use of capital invested in each department.
- It helps to have comparison of various expenses of each department with the previous period or with other departments of the same concern.
- It helps to know the efficiency of each department by calculating stock turnover ratio of each department to reveal the fast or slow movement of various items of stock.
- The information provided by departmental accounts may be helpful to the management for future intelligent planning and control.


## Objectives of departmental accounting

- To assess each department on the basis of operational performance.
- To keep separate set of accounts of each department to monitor the trend of performance.
- To take special care of weak department to improve the performance.
- To decide the further investment or disinvestment of the fund among the different departments based on the outcome of the performance assessment.
- To check out interdepartmental performance
- To evaluate the performance of the department with previous period result.
- To help the owner for formulating right policy for future.
- To assist the management for making decision to drop or add a department
- To provide detail information of the entire organization
- To assist management for cost control


## Distinguish department accounting and Branch accounting.

| Department Accounting | Branch Accounting |
| :--- | :--- |
| Accounting are relating to each of the several <br> department or divisions of a business | In the case of a branch types of organisation the <br> parent establishment |
| Various parts of the business are located under <br> the same roof | Various parts of the business are located in <br> different places |
|  <br> departmental trading and profit and loss <br> account is prepared accordingly | In case of branch, all branch accounts are kept <br> at Head Office except cash, customers and <br> stock registers are maintained at branch. |
| Departments are not geographically separated <br> from each other, so problem of allocation of <br> common expenses among different <br> departments arises. | As branches are geographically separated from <br> each other so the problem of allocation of <br> common expenses among different branches <br> does not arises. |
| The question of adjustments and <br> reconciliation of accounts does not arise in <br> departmental accounts. | In case of independent branch some <br> adjustments and reconciliation of head office <br> and the branch accounts are required to be done <br> at the end of the year. |
| The problem of conversion of foreign <br> currency into home currency does not arise. | The problem of conversion of foreign branch <br> figures may arise at the time of finalization of <br> accounts of head office. |

## Basics for Preparing Inter-department Accounts

The preparation of Departmental Trading and Profit \& Loss Account requires maintenance of proper subsidiary books having appropriate columns for different departments. This may be done by having columnar subsidiary books and a columnar ledger. Alternatively, a separate set of books may be kept for each department, including complete stock accounts of goods received from or transferred to other departments or as also sales.

For example, if a business has three departments A, B \& C, the subsidiary books such as Purchases Book, Purchases Returns Book, Sales Book, Sales Returns Books, etc., should have separate columns for each of the departments. Cash Book may also have columns for
recording cash sales of each of the departments separately in case the volume of cash sales is quite large.


## Allocation of Expenses between Different Departments

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

1. Expenses incurred specially for a particular department are charged directly to the concerned department. For example, salary paid to each of the department manager.
2. Common expenses, which are charged as a whole should be distributed among the departments on some equitable basis. For example, Rent is charged to different departments according to the floor area occupied by each department, having regard to any favourable location specially allocated to a department. Lighting and heating expenses are distributed on the basis of consumption of energy by each department and so on.
3. Expenses which are not easy to measure separately should be categorised on the basis of sales; For example, selling expenses like discount, bad debts, selling commission, etc. are charged on the basis of sales; Administrative and other expenses, e.g., salaries of managers, directors, common advertisement expenses, depreciation on assets, etc. are allocated equally among all the departments that have benefited thereby.

Common Basis for Allocation of Expenses

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

## Types of Departments

There are two types of departments:

- Dependant Departments
- Independent Departments


## 1. Dependant Departments:

Dependent departments are those departments where the output of one department becomes the input for another department. Dependant departments transfer goods from one department to another department for further processing. These transfers may be done at cost or some pre-decided selling price. The price at which interdepartmental transfer is recorded which may be the cost or cost plus the margin of profit is known as transfer price.
2. Independent Department:

Independent departments are the departments which work independently of each other and have negligible inter department transfer.

## Advantages of Departmental Accounting

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


## Inter-departmental Transfer at Cost and Invoice Price

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

The interdepartmental transfer of goods or services may be done either:

- Cost Price
- Invoice Price


## Transfer of Goods at Cost price

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

## Illustration: 1

From the following Trial Balance of Ram and Shyam, prepare Departmental Trading and Profit and Loss Account for the year ending 31st March, 1998 and the Balance Sheet as at that date: ₹ in 000

Stock (1st April, 1997)
Department X 3400
Department Y 2900
Purchases
Department X 7,180
Department Y 6,040
Sales
Department X 13,160
Department Y 10,250
Wages
Department X 1640
Department Y 540
Rent, Rates \& taxes 1878
Sundry Expenses 720
Salaries 600
Lighting \& Heating 420
Discount Allowed 444
Discount Received 130
Advertising 736
Carriage Inwards 468
Furniture \& Fittings 600
Machinery 4200
Sundry Debtors 1212
Sundry Creditors 3720
Capital 9532
Drawings 900
Cash at Bank 2014
The following additional information is available:

- Inter-transfer of goods from X to Y department ₹ 84,000 .
- Rent, rates and taxes, sundry expenses, lighting and heating, Salaries and carriage are to be apportioned in the ration of $2: 3$ between department X and Department Y .
- Discount allowed and received are to be apportioned on the basis of departmental sales and purchases (excluding transfers)
- Depreciation at $10 \%$ per annum on Furniture and Fittings and on Machinery is to charged in the ration of $3: 1$ between the department X and Y .
- $\quad$ Services rendered by department $Y$ to department $X$ are included in wages as ₹ $1,00,000$.
- Stock on 31st March, 1998 in X Department was worth ₹ 33,48, 000 and in Y Department ₹ $24,111,000$.

Solution:

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

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

| Liabilities | Amount <br> $(\mathrm{Rs})$ | Amount <br> $(\mathrm{Rs})$ | Assets | Amount <br> $(\mathrm{Rs})$ | Amount <br> $(\mathrm{Rs})$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Capital | 9,532 |  | Machinery | 4,200 |  |
| Add: Profit | 952 |  | Less: Dep. | 420 | 3,780 |
|  | 10,484 |  | Furniture and fittings | 600 |  |
| Less: Drawings | 900 | 9,584 | Less: Dep. | 60 | 540 |
| Sundry Creditors |  | 3,720 | Stock in trade |  | 5,758 |
|  |  |  | Sundry debtors |  | 1,212 |
|  |  |  | Cash at bank |  | 2,014 |
|  |  | 13,304 |  |  | 13,304 |

## Transfer of Goods at Invoice Price

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

General Profit \& Loss A/c
To Stock Reserve

It may be noted that the unrealised profit is equal to the amount of difference between the selling price and the cost price of the unsold/unused stock.

## Illustration 2

A firm has two departments, cloth and ready-made garments. The garments were made by the firm itself out of cloth supplied by the cloth department at its selling price. From the following figures prepare Departmental Trading and Profit \& Loss Account for the year 1997.

| Particulars | Cloth <br> Department (₹ ) | Ready-made <br> Garments (₹) |
| :--- | ---: | ---: |
| Opening Stock on 1.1.1997 | $6,00,000$ | $1,00,000$ |
| Purchases | $40,00,000$ | 30,000 |
| Sales | $44,00,000$ | $9,00,000$ |
| Transfer to Ready-made <br> Garments Department | $6,00,000$ | - |
| Expenses - Manufacturing | - | $1,20,000$ |
| - Selling | 40,000 | 12,000 |
| Stock on 31.12.1997 | $4,00,000$ | $1,20,000$ |

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

## Solution

Departmental Trading and Profit and Loss A/c for the year ending Dec 31, 1997

| Particulars | Cloth <br> (Rs) | Readymade <br> Garments <br> (Rs) | Total | Particulars | Cloth <br> (Rs) | Readymade <br> Garments <br> (Rs) | Total |
| :--- | :---: | :---: | :---: | :--- | :---: | :---: | :---: |
| To Opening <br> Stock | $6,00,000$ | $1,00,000$ | $7,00,000$ | By Sales | $44,00,000$ | $9,00,000$ | $53,00,000$ |
| To <br> Purchases | $40,00,000$ | 30,000 | $40,30,000$ | By Transfer to <br> Ready-made <br> Garments <br> Dept. | $6,00,000$ |  | $6,00,000$ |
| To Transfer <br> from Cloth <br> Dept. |  | $6,00,000$ | $6,00,000$ | By Closing <br> Stock | $4,00,000$ | $1,20,000$ | $5,20,000$ |
| To Mfg. <br> Exp. | $1,20,000$ | $1,20,000$ |  |  |  |  |  |
| To Gross <br> Profit c/d | $8,00,000$ | $1,70,000$ | $9,70,000$ |  |  |  |  |


|  | $54,00,000$ | $10,20,000$ | $64,20,000$ |  | $54,00,000$ | $10,20,000$ | $64,20,000$ |
| :--- | ---: | ---: | ---: | :--- | ---: | ---: | ---: |
| To Selling <br> Exp. | 40,000 | 12,000 | 52,000 | By Gross <br> Profit b/d | $8,00,000$ | $1,70,000$ | $9,70,000$ |
| To Net <br> Profit c/d | $7,60,000$ | $1,58,000$ | $9,18,000$ |  |  |  |  |
|  | $8,00,000$ | $1,70,000$ | $9,70,000$ |  | $8,00,000$ | $1,70,000$ | $9,70,000$ |
| To Gen. <br> Exp. |  |  | $2,20,000$ | By Net Profit <br> b/d |  |  | $9,18,000$ |
| To Stock <br> Reserve (cl. <br> stock) |  | 14,400 | By Stock <br> Reserve (op. <br> stock) |  |  | 11,250 |  |
| To Net <br> Profit |  | $6,94,850$ |  |  |  |  |  |
|  | $9,29,250$ |  |  |  | $9,29,250$ |  |  |

Note: Stock Reserve has been calculated as follows:
Rate of Gross Profit on Sales in Cloth Debt

$$
\frac{8,00,000}{50,00,000} \quad \text { X } 100=16 \%
$$

Element of cloth in closing stock of Garments

$$
75 \% \text { of ₹ } 1,20,000=₹ 90,000
$$

Unrealised Profit $=\frac{16}{100}$ X $90,000=₹ 14,400$
Unrealised Profit in opening stock of Garments

$$
\frac{15}{100} \times \frac{75}{100} \times 1,00,000=11,250
$$

## Illustration 3

The following figures relate to the business of Singla Associates for the year ended 31st December, 2007:

| Particulars | Department |  |
| :--- | ---: | ---: |
|  | (Rs) | Y |

Y's entire stock represents goods from Department X which transfers them at $25 \%$ above the cost, Administrative and Selling Expenses mount to ₹ 30,000 which are to be allocated between Departments X and Y in the ratio of $4: 1$ respectively.

Prepare Departmental 'Trading and Profit and Loss Account' and a Combined Income Account of the business for the year ended 31st December, 2007.

Solution:
Departmental Trading and Profit and Loss A/c for the year ending Dec 31 2007

| Particulars | $\mathrm{X}(\mathrm{Rs})$ | $\mathrm{Y}(\mathrm{Rs})$ | Particulars | $\mathrm{X}(\mathrm{Rs})$ | $\mathrm{Y}(\mathrm{Rs})$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| To Opening Stock | 80,000 | -- | By Transfer of Goods to Y | $1,00,000$ | --- |
| To Purchases | $4,00,000$ | 40,000 | By Sales | $4,00,000$ | $1,42,000$ |
| To Wages | 20,000 | 2,000 | By Closing Stock | 60,000 | 20,000 |
| TO Goods from X | -- | $1,00,000$ |  |  |  |
| To Gross Profit c/d | 60,000 | 20,000 |  |  |  |
|  | $5,60,000$ | $1,62,000$ |  | $5,60,000$ | $1,62,000$ |
| To Adm. \& Selling Expenses | 24,000 | 6,000 | By Gross profit b/d | 60,000 | 20,000 |
| To Net Profit | 36,000 | 14,000 |  |  |  |
|  | 60,000 | 20,000 |  | 60,000 | 20,000 |

Dr. Profit and Loss A/c for the year ending Dec 31, $2007 \quad \mathrm{Cr}$.

| Particulars | $₹$ | Particulars | $₹$ |
| :--- | ---: | :--- | ---: |
| To Stack Reserve | 4,000 | By Net Profit as per Dept. |  |
| To Net Profit (to Capital A/c) | 46,000 | Trading and profit and loss A/c |  |
|  |  |  | X Dept. |
|  |  | 36,000 |  |
|  | 50,000 |  | Y Dept. |
|  | 14,000 |  |  |
|  |  | 50,000 |  |

## Question Bank

## Section A

1. What do you mean by departmental accounts? Why are they considered necessary?
2. Discuss the basis for allocation of common expenses among different departments.
3. Prepare the proforma of departmental subsidiary books.
4. Illustrate the accounting treatment of interdepartmental transfer of goods.
5. What is unrealised profit? How it is worked out and accounted for?

## Section B

1. Alpha Ltd., has a factory with two manufacturing departments ' X ' and ' Y '. Part of the output of department X is transferred to department Y for further processing and the balance is directly transferred to selling department. The entire production of department Y is directly transferred to the selling department. Interdepartmental stock transfers are made as follows:

X department to Y department at $33-1 / 3 \%$ over departmental cost.
Xdepartment to selling department at 50\% over departmental cost.
Ydepartment to selling department at $25 \%$ over departmental cost.
The following information is given for the year ending $31^{\text {st }}$ March 2011.

| Particulars | Department X |  |  | Department Y |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Selling <br> Department |  |  |  |  |  |
|  | Units | $₹$ | Units | $₹$ | Units |
| Opening stock Finished Goods | 60 | 60,000 | 20 | 40,000 | 50 |
| Raw materials | - | - | - | - | - |
| Raw materials consumed | - | $1,82,000$ | - | 20,000 | - |
| Labour charges | - | 70,000 | - | - |  |
| Sales | - | - | - | - | 120 |
| Closing stock Finished Goods | 40 | - | 50 | - | - |

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

Prepare Departmental Profit and Loss Account and General Profit and Loss Account.
2. Illustrate the transfer of goods at invoice with a suitable example.
3. Suman Ltd. is a departmental store having three departments X, Y and Z. The manager of each department is entitled to a commission of $10 \%$ of the net profit of the department besides their annual salary of Rs. 3,000 each. The information regarding three departments for the year ended $30^{\text {th }}$ June, 1993 are given below:

|  | X <br> Rs. | $\mathbf{Y}$ <br> Rs. | Z <br> Rs. |
| :--- | ---: | ---: | ---: |
| Opening Stock | 72,000 | 48,000 | 40,000 |
| Purchases | $2,64,000$ | $1,76,000$ | 88,000 |
| Debtors at end | 15,000 | 10,000 | 10,000 |
| Sales | $3,60,000$ | $2,70,000$ | $1,80,000$ |
| Closing stock | 90,000 | 35,000 | 42,000 |
| Floor space occupied by each department (In sq, ft.) | 3,000 | 2,500 | 2,000 |
| Number of employees in each Deptt. | 25 | 20 | 15 |

The balance of other revenue items in the books for the year and the basis of their allocation amongst three departments are given below:

| Items | Amount <br> Rs. | Basis |
| :--- | ---: | :--- |
| Carriage Inwards | 6,000 | Purchases |
| Carriage Outwards | 4,500 | Turnover |
| Salaries including Managers' salaries | 81,000 | No. of Employees |
| Advertisement | 5,400 | Turnover |
| Discount allowed | 2,250 | Turnover |
| Discount received | 1,800 | Purchases |
| Rent, Rates and Taxes | 7,500 | Floor Space occupied |
| Depreciation on furniture | 1,500 | equal |

Assets and liabilities on $30^{\text {th }}$ June, were as follows:

|  | Debit <br> $\boldsymbol{R s}$. | Credit <br> $\boldsymbol{R s}$ |
| :--- | ---: | ---: |
| Share Capital | $1,00,000$ | $3,00,000$ |
| Goodwill |  |  |
| Bills Payable | 42,500 | 12,100 |
| Bills Receivable | 13,500 |  |
| Furniture |  | 27,000 |
| Sundry Creditors | 1,750 |  |
| Cash in hand | $1,62,000$ |  |
| Cash at bank |  |  |

You are required to prepare Trading and Profit \& Loss Account for the year ended $30^{\text {th }}$ June, 1993 (after providing provision for Bad Debts at 5\%) and a Balance Sheet as on that date.
4. A firm has two departments, Timber and Furniture. Furniture was made by he firm itself out of timber supplied by the Timber Department. The trading and Profit and Loss Accounts for the year 1992 is as follows:

|  | Timber | Furniture |
| :--- | ---: | ---: |
|  | $\underline{\boldsymbol{R s} .}$ | $\underline{\text { Rs. }}$ |
| Opening Stock (1.1.1992) | $3,00,000$ | 50,000 |
| Purchases | $20,00,000$ | 15,000 |
| Sales | $22,00,000$ | $4,50,000$ |
| Transfer to Furniture Deptt. | $3,00,000$ | - |
| Expenses — Manufacturing | - | 60,000 |
| - Selling | 20,000 | 6,000 |
| Stock - 31-12-1992 | $2,00,000$ | 60,000 |

The Stocks in the Furniture Department may be considered as consisting of 75 percent of timber and 25 percent other expenses. Timber Department earned gross profit at the rate of 20 percent in 1991. General expenses of the business as a whole came to Rs. 1,00,000.
5. M/s bright \& co., had four department A,B,C and D. Each department being managed by a departmental manager whose commission was $10 \%$ of the respective departmental profit, subject to a minimum of Rs. 6,000 in each case. Interdepartmental transfers took place at a 'loaded' price as follows:

From department A to department B 10\% above cost From department A to department D20\% above cost
From department C to department B 20\% above cost
From department C to department D $20 \%$ above cost
For the year ended $31^{\text {st }}$ March, 1991 the firm had already prepared and closed the departmental trading and Profit \& Loss account. Subsequently it was discovered that the closing stocks of departments had included interdepartmentally transferred goods at loaded price instead of cost price. From the following information prepare a statement recomputing the departmental profit or loss:-

|  | Dept. A <br> Rs. | Dept. B <br> Rs. | Dept. C <br> Rs. | Dept. D <br> Rs. |
| :--- | :---: | :---: | :---: | :---: |
| Final profit/loss | 38,000 <br> (loss) | 50,400 <br> (profit ) | 72,000 <br> (profit ) | $1,08,000$ <br> (profit ) |
| Interdepartmental <br> transfers included | - | 70,000 <br> (Rs. 22,000 from Deptt. | - | 4,800 <br> (Rs.3,600 from |


|  |  | A | Deptt. C |
| :--- | :--- | :--- | :--- | :--- |
| At loaded price <br> in the departmental <br> Stock | and Rs. 48,000 from <br> Deptt. C) | and Rs. 1,200 from <br> Deptt. A) |  |

## Section C

1. The following purchases were made during the year 1989 by a business house having three departments:

## Department

| A 1000 units |  |
| :--- | :--- |
| B 2000 units | at total cost of Rs. $1,00,000$ |
| C 2400 units |  |

Stock on 1st January 1989 were:
A 120 units
Department B 80 units
C 152 units
The sale during 1989
were :
A 1,020 units at Rs. 20 each
Department B 1,920 units at Rs. 22.50 each
C 2,496 units at Rs. 25 each

The rate of gross profit is the same in each case, Prepare Department Trading Account for the year 1989 .
2. Telerad \& Co. has two departments A and B. From the following particulars, prepare Departmental Trading Account and consolidated Trading Account for the year ending 31 ${ }^{\text {st }}$ March 1993.

## Deptt. A Rs.

Opening stock (at cost)
Purchases
Wages
Sales (excl. inter transfers)
Carriage
Purchased goods transferred :
By B to A
By A to B
1,00,000

## Deptt. B

Rs.
60,000
4,60,000
60,000
3,40,000
40,000
7,00,000
10,000
50,000

Finished goods transferred :
By B to A
By A to B
Return of finished goods :

> By B to A

By A to B
50,000

Closing stock: Purchased goods
Finished goods
22,500
1,20,000
5,60,000
10,000

40,000
1,75,000
2,00,000

35,000

Purchased goods have been transferred at their respective departmental purchase cost and finished goods at departmental market price. $20 \%$ of finished stock (closing) at each department represented finished goods received from the other department.
3. Moon Ltd. three departments. They are 'Cloth Stitching Dept.', Selling Departments and General Administration Department. Cloth Dept. Transfers its goods to Selling Deptt. $20 \%$ profit on Cost. From the following details, prepare Departmental Trading A/c and Profit and Loss A/c for the year ended $31^{\text {st }}$ Dec. 2002.

## Cloth Stitching

|  | Rs. | Seling Dept. |
| :--- | ---: | ---: |
| Rs. |  |  |
| Opening Stock | $1,20,000$ | 80,000 |
| Purchase | $5,00,000$ | -- |
| Wages and other Exp. | $1,25,000$ | 25,000 |
| Clothing Stock | 45,000 | 95,000 |
| Sales | ---- | $11,05,000$ |

During the year goods costing Rs. 50,000 to selling department, were returned back to cloth department.

- The expenses of General Admn. Dept. are as follows:
- Manager's Salary @ Rs. 1,000 p.m
- Clerk's Salary (2 Nos.)
@ Rs. 600 p.m (each)
- Maintenance Expenses

Rs. 9,600
Apportion General Dept. Expenses equally to the 'Cloth stitching' and 'Selling Dept.'
4. Complex Ltd. has three departments. $\mathrm{AB} \& \mathrm{C}$ The following information is provided;

| Particulars | A | B | C |
| :--- | :---: | :---: | :---: |
|  | Rs. | Rs | Rs. |
| Opening Stock | 3,000 | 4,000 | 6,000 |
| Consumption of Direct Materials | 8,000 | 12,000 | -- |
| Wages | 5,000 | 10,000 | -- |
| Closing Stock | 4,000 | 14,000 | 8,000 |
| Sales | -- | -- | 34,000 |

Stocks of each department are valued at cost to the department concerned. Stocks of $A$ department are transferred to B at a margin of $50 \%$ above departmental cost. Stocks of B department are transferred to C department at a margin of $10 \%$ above departmental cost.

Other expenses were :
Salaries
Rs. 2,000
Printing \& Stationery
Rent
Interest paid
Depreciation
Rs. 1,000
Rs. 6,000
Rs. 4,000
Rs. 3,000

Allocate expenses in the ratio of departmental gross profit. Opening figures of reserves for unrealized profits on departmental stocks were: Department B -Rs. 1,000.

Departmental C - 2,000. Prepare Departmental Trading and Profit \& Loss Account
5. A Ltd. has a factory which has two manufacturing departments $X$ and $Y$. Part of the output of X Department for further processing and the balance in directly transferred to the Selling Department. Inter-departmental stock transfers are made as follows:

XDepartment to Y Department of 33-1/3 \% over-departmental cost. X Department to Selling Department of $50 \%$ over departmental cost.

Y Department to Selling Department of 25 \% over departmental cost. The following information is given for the year ending $31^{\text {st }}$ march, 1986.

| Particulars | Department X |  | Department Y |  | Selling Department |  |
| :--- | ---: | ---: | :---: | ---: | :---: | ---: |
|  | MT | Rs. | MT | Rs. | MT | Rs. |
| Opening stock | 60 | 60,000 | 20 | 40,000 | 50 | $1,45,000$ |
| Raw Material | 90 | $1,00,000$ | 20 | 20,000 | - | - |
| Consumption |  |  |  |  |  |  |
| Labour charges | - | 50,000 | - | 80,000 | - | - |
| Sales | - | - | - | - | - | $5,00,000$ |
| Closing stocks | 30 | - | 50 | - | 60 | - |

Out of the total production in X Department 30 MT were for transfer to the Selling Department. Apart from these stocks which were transferred during the year the balance output and the entire opening and closing stocks of X Department were for transfer to Y Department. The per tonne material and labour consumption in X Department on production to be transferred directly to the Selling Department is 300 per cent of the labour and material consumption on production meant for Y Department
(i) Prepare Departmental Profit and Loss Account; (ii) General Profit and Loss Account.

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(DEEMED TO BE UNIVERSITY)

## SCHOOL OF MANAGEMENT STUDIES

## UNIT-III HIRE PURCHASE SYSTEM

Hire purchase trading is a system of retail business. Under this system, the seller agrees to sell the good on condition that the buyer shall pay the purchase price by a fixed number of installments. These installments may be made monthly, quarterly, half-yearly, yearly or any other period. Moreover under this system goods are delivered to the buyer and the buyer becomes the owner of such goods only on payment of last installment. But if the buyer defaults in the payment of any installment, the seller will have a right to repossess the goods from the buyer and forfeited amount already received treating it as a hire (rent) charges. However in case the buyer makes the payment of all the installment on the due date, the seller has no rights to repossess the goods from the buyer.

## Definition:

The hire purchase system is regulated by the hire- purchase act 1972, under section 2 of the act, hire- purchase agreement means an agreement under which the good are let on hire and under which the hirer has on option to purchase them in accordance with the terms of the agreement and includes as agreement under which.
I. Possession of goods is delivered by the owner there of to a person on condition that such person pay the agreed amount in periodical installment, and
II. The property in the good is to pass to such person on the payment of the last of such installment, and
III. Such person has a right to terminate the agreement at any time before the property so passess.

## Features of hire-purchase system:

1. The hire vendor transfers only the possession of the goods to the hire- purchase immediately after the contract of hire- purchase is made
2. Goods are delivered to the hire -purchase on the condition that he should pay the agreed amount in periodical installment.
3. The hire -purchase generally makes a down payment (initial investment) immediately on signing the agreement. However, he should pay the balance of the amount with interest in installment at regular intervals for a specified period.
4. The hire-vendor treats each installment including down payment (if any) as hire charges.
5. Each installment consists partly of interest and partly of capital payment
6. The hire-vendor remains the owner of the goods up to the time of payment of the last installment.
7. The hire-purchase becomes the owner of these goods on payment of the last installment.
8. It is the duty of the hire- purchaser to keep the goods in good condition upto the date of payment of the last installment.
9. It is the responsibility of the owner to make normal repairs free of cost in these goods up to the date of payment of the last installment.
10. The hire-purchase has the right to terminate agreement at any time.
11. In case the hire- purchase defaults is payment (of even the last installment) the hire -vendor can take possession of the good subject to legal requirements.

## Important terms

Under section 7 of the hire-purchase act 1972, the important terms relating to this system are as follows.

1. Hirer: The person who obtains or has obtained possession of goods from an owner under a hire-purchase agreement.
2. Owner or hire-vendor: The person who lets or has let, delivers or has delivered possession of goods, to a hirer under a hire purchase agreement.
3. Hire: The sum payable periodically by the hirer under the hire-purchase agreement
4. Down payment: The amount required to the paid by the buyer on signing the agreement under hire-purchase or installment system. It is a part of hire-purchase price
5. Cash price: The amount for which an article can be brought by immediately making a lump sum payment, without there being any facility of installment.
6. Net cash price: the cash price of the goods as required to be stated is the hirepurchase agreement less any deposit is net cash price.
7. Deposit: It refers to initial payment whether paid or credited to be paid as per the terms of the hire-purchase agreement.
8. Hire-purchase price: It is the total sum payable by the hirer under the hire-purchase agreement .it includes any deposit or initial payment, but does not include any sum payable as penalty or compensation for a breach of the agreement.
9. Net hire-purchase price: It means the total amount of hire-purchase price of the good which is required to be specified in the hire-purchase agreement less any amount payable
a) To cover the expenses of delivering the goods
b) To cover registration or other fees under any law in respect of the goods.
c) For insurance (other than third party insurance) in respect of the good.
10. Hire-purchase charge: The statutory charge or maximum hire-purchase charge is respect of cash prince installment is an amount calculated at the rate of $30 \%$ p.a or of a lower rate as specified under sub-section (3) at such a lower rate is a accordance with the following.
Formula: $\mathrm{sc}=\frac{c \mathrm{cxrxx}}{100}$
Where
$\mathrm{SC}=$ statutory charges
$\mathrm{CI}=$ amount of cash price installment expressed in rupees or fraction of rupees
$\mathrm{R}=$ rate
$\mathrm{T}=$ time, expressed is year and fraction of year that elapses between the date of the agreement and the date on which the hire-purchase installment corresponding to the cash price installment in payable under the agreement.
11. Net hire-purchase changes: It is the difference between the net hire-purchase price and the net cash price of the goods comprised in the hire-purchase agreement

Cost+ profit= cash price debited to assetalc cost price + interest $=$ Hire - purchase price

Interest $\longrightarrow$ Debited to profit and loss account.

## Installment purchase system or deferred installment system:

In statement purchase system also an agreement is entered into by the seller and buyer an all vance or down payment is paid and possession as well as ownership in the good is transferred to the buyer. The buyer agrees to pay the balance of amount due in a specified no. of installment along with agreed rate of interest. If buyer fails to pay any installment the seller cannot repossess the goods. He can sue the buyer is a court for recovery of the dues

Distinction between hire-purchase and installment system

| S.no | Basis | Hire purchase system | Installment system |
| :---: | :---: | :---: | :---: |
| 1. | Nature of agreement | It is an agreement of hiring with option to buy | It is an agreement on sale |
| 2. | Transfer of ownership | Ownership is transferred on payment of final installment | Ownership is transferred or signing of the agreement |
| 3. | Name of the parties | The buyer is called hirer and seller as owner or hire vendor | The parties involved are called buyer and seller |
| 4. | Relationship | The relationship of hirer and hire vendor is that of bailor and bailee | The relationship between the buyer and seller is that of a debtors and creditor till last installment is paid |
| 5. | Risk of loss | The hirer is not responsible for any loss of the goods if he has taken responsible precautions | The buyer is responsible for loss goods because he is the owner |
| 6. | Right of sale | The hirer cannot sell the good till he gets ownership | The buyer has the right to sell the goods even before installments are paid |
| 7. | Repossession of goods | The hire vendor can repossess the goods if installment is not paid | Seller cannot repossess the goods he can sue the buyer for dues |
| 8. | Termination of agreement | The hirer can terminate the agreement by returning the goods | The agreement cannot be terminated |
| 9. | Installment | Each installment includes hire charges and part payment of the cash Price | Each installment includes interest and part payment of cash price |
| 10. | Governing | Hire purchase act 1972 governs the hire purchase agreement | Installment purchase is governed by sale of goods act. |

## Accounting Treatment of Hire Purchase Transactions

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

## Accounting Treatment in the Books of Hire Purchaser

There are two methods by which the purchaser can record the transactions in the books of accounts.

1. When assets are recorded at full cash price
2. When assets are recorded at actual cash price paid

When assets are recorded at full cash price
The following entries are passed in the books of hire purchaser:

1. When Asset is purchased on Hire Purchase

| Particulars | L.F. | Debit | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| Assets A/c <br> To Hire Vendor A/c <br> (Asset purchased under hire <br> purchase system) | Dr. |  |  |  |

2. For cash down payment

| Particulars | L.F. | Dr. | Cr. |  |
| :--- | :--- | :--- | :--- | :---: |
| Hire Vendor A/c <br> To Cash A/c <br> (Cash down payment) | Dr. |  |  |  |

3. For interest accrued

| Particulars | L.F. | Debit | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| Interest A/c <br> To Hire Vendor A/c <br> (Interest account debited) | Dr. |  |  |  |

4. When the first installment is paid

| Particulars | L.F. | Debit | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| Hire Vendor A/c <br> To Bank A/c <br> (payment of 1st instalment) | Dr. |  |  |  |

5. For Depreciation charges

| Particulars | L.F. | Debit | Credit |
| :--- | :--- | :--- | :--- | :--- |
| Depreciation A/c Dr. <br> To Asset A/c  <br>   <br> (Depreciation charged on asset)  <br>   <br>  ${ }^{2}$ |  |  |  |

6. For transfer of interest and depreciation to profit and loss A/c

| Particulars | L.F. | Dr. | Cr. |  |
| :--- | :--- | :--- | :--- | :--- |
| Profit and Loss A/c | Dr. |  |  |  |
| To Interest A/c <br> To Depreciation A/c |  |  |  |  |
| (Interest and depreciation are <br> transferred to profit and loss A/c) |  |  |  |  |

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

## Books of Hire vendor:-

The following are the journal entries in hire vendor's books for goods of high value sold.

1. When goods are sold on hire purchase agreement

Hire purchaser's A/c Dr (cash price)
To hire sales A/c
[Being cash price of goods sold on hire purchase]
2. When down payment is received

## Cash A/c Dr

To hire sales $\mathrm{A} / \mathrm{c}$
[Being receipt of down payment]
3. on the date of $1^{\text {st }}$ instalment for interest receivable Hire purchase's A/c

Dr
To interest $\mathrm{A} / \mathrm{c}$
[Being interest receivable with $1^{\text {st }}$ instalment]
4. for receiving the amount of $1^{\text {st }}$ instalment
Cash A/c
Dr

To hire purchaser's A/c
\{Being receipt of $1^{\text {st }}$ installment]
Note: - Entries 3 and 4 are repeated for every instalment
5. at the end of the accounting year

For transfer of interest to profit and loss A/c
Interest $\mathrm{A} / \mathrm{c} \quad \mathrm{Dr}$
To profit and loss A/c
[Being transfer of interest to $\mathrm{P} \& \mathrm{~L} \mathrm{~A} / \mathrm{c}$ ]
Depreciation is not recorded by the hire vendor, though legally the goods sold belong to him because he is not using them.

## Calculation of interest:

The hire purchase price is always greater than the cash price. It includes interest payable over and above the price of the goods to compensate the seller for the sacrifice he has made by agreeing to receive the price by instalments and the risk that he thereby undertakes. Interest is the charge for the facility to pay the price for the goods $b y$ instalments after they have been delivered. The rate of interest is generally higher than that is payable in respect of an advance or a loan since it also includes a charge to cover the risk that the hirer may fail to
pay any of the instalments and in such an event, the goods may have to be taken back into possession in whatever condition they are at that time. A separate charge on this account is not made as that would not be in keeping with the fundamental character of the hire purchase sale. However, in accounting system, the excess of total hire purchase price over the total cash price is treated as the payment for interest.

Since each instalment includes interest also which is financial gain or loss, it is essential to know the different methods of ascertaining interest.

Interest included in each instalment can be ascertained by making necessary calculations under the following circumstances:
i. When the rate of interest , the cash price and the instalments are given
ii. When the rate of interest is not given.
iii. When the total cash price is not given
iv. When the instalment price is not given
v. When cash price is calculated by annuity method.

## 1. When the rate of interest, the cash price and the instalments are given:

Under this method, the interest is to be calculated on the outstanding balance of the cash price at the stipulated rate. When interest component is deducted from instalment, the balance represents the amount paid in reduction of cash price. This amount is deducted from the cash price to facilitate the calculation of interest for the next period. Since the instalments are in round sums of money, the interest for the final year should be taken as the difference between the cash price outstanding at the end of that period and the amount of instalments. This will be clearly understood by referring to Illustration1.

## 2. When total cash price and instalments are given but rate of interest is not given:-

When the rate of interest is not given, the interest included in each instalment will be calculated on the basis of the hire purchase price outstanding in the beginning of each year. The following is the process of ascertaining interest included in various instalments.

## Method 1:- when the amount and period of instalments are not uniform [product

 method]Hire purchase price- cash price
Hire purchase price - first instalment
First balance- second instalment
Second balance- third instalment
$=$ Total interest
$=\quad$ First balance
$=\quad$ Second balance
$=\quad$ Third balance

Same method can be used for further instalment:-
i. Hire purchase price $\times$ period of first instalment $=\mathrm{A}$
ii. First balance $\times$ Period of second instalment $=B$
iii. Second balance $\times$ period of third instalment $=\mathrm{C}$
iv. Third balance $\times$ period of fourth instalment $=\mathrm{D}$

A, B, C and D have to be totaled and interest included in each instalment is found as follows. Interest included in 1 instalment : Total interest $\times$ $\qquad$
Interest included in 2 instalment : Total interest $\times \frac{A}{A+B+C+D}$
Interest included in 3 instalment : Total interest $\times \frac{A}{A+E+C+D}$
Interest included in 4 instalment $: \quad$ Total interest $\times \frac{A}{A+B+C+D}$

## Methods 2:- When the amount and period of instalments are uniform [inverse progression method]

$$
\text { Hire purchase price }- \text { cash price } \quad=\text { Total Interest }
$$

Assuming total interest is Rs. 800 and numbers of instalments are four, interest included in each instalment is calculated in the following manner:-

| Instalments | No of outstanding Instalments | Ratio of interest | Interest |
| :---: | :---: | :---: | :---: |
| $1{ }^{\text {st }}$ Instalment | 4 | $\frac{4}{10}$ | (800X 4/10): Rs. 320 |
| $2^{\text {st }}$ Instalment | 3 | $\frac{3}{10}$ | (800X 3/10): Rs. 240 |
| $3^{\text {st }}$ Instalment | 2 | $\frac{2}{10}$ | (800X 2/10): Rs. 160 |
| $4^{\text {st }}$ Instalment | 1 | $\frac{1}{10}$ | (800X 1/10): Rs. 80 |
|  | 10 |  |  |

Method3:- when rate of interest and instalments are given but total cash price is not give.

When the amount of each instalment which includes interest is given and rate of interest is also given, cash price is found out in the following manner:
a) First of all find out cash price of the last instalment:

$$
\begin{aligned}
& \text { Amount of last instalment } \times \frac{\text { Rateofinterest }}{100+\text { Rateofinterest }} \\
&=\text { Interest included in the last instalment. }
\end{aligned}
$$

This interest is deducted from last instalment and cash price of the last instalment is found out.
b) (cash price of the last

```
Instalment + amount \(\quad \times \frac{\text { Rateofinterest }}{100+\text { Kateofinterest }}=\) Interest of the prior instalment
of prior instalment )
```

When the interest is deducted from prior instalment, cash price of the prior instalment is found out.
c) The same process may be repeated for earlier instalments

## Method 4: When rate of interest and total cash price are given but the instalment price is not given.

In this method is also, the interest is to calculate on the outstanding balance of the cash price at the stipulated rate. Then cash price paid is deducted from the total cash price and interest is calculated for the next period failing between the dates of payment of first instalment and second instalment. This process is repeated till the payment of last instalment.The instalment price is calculated by adding interest with cash price of each instalment.(Refer Illustration 4) .

## Method 5: Calculation of cash price by Annuity method:

When in place of cash price, hire purchase price and annuity rate are given, the cash price is calculated by multiplying the amount of instalment with the annuity factor given and adding down payment to the product. Then interest is calculated (Refer Illustration 5)

## DEFAULT AND REPOSSESSION

Default: If the hire purchase fails to make payment of any instalment, it is called 'default.Unless he regularizes the matter, the hire vendor can take back the goods into his possession after default.

## Repossession

The hire vendor has the right to take away the goods sold on hire purchase in the event of default made by the hire purchaser. As per Hire purchase, Act 1972 goods of small value or eve goods of higher value when only certain numbers of instalments are paid can be repossessed without court's permission. A court order is needed to repossess goods on which large numbers of instalments than specified are paid.

The hire vendor can repair or recondition the repossessed goods and sell them to anyone else.

## Types of repossession

a) Complete Repossession: - The hire vendor may take away all the goods on which there is default of instalment.
b) Partial Repossession: - The hire vendor may take away only a portion of the goods on which there is default of instalments.

Accounting treatment varies in the books of both the hire vendor and hire purchaser for each of the types of repossession.

## A) Complete repossession of goods

When complete repossession of goods takes place, the ledger accounts in the books of hire purchaser and the hire vendor are fully closed as far as the hire-purchase transaction is concerned.

## Books of Hire vendor

1) On the date of default of instalment, entry for interest is passed. The hire purchaser's account is closed. Any balance is transferred to repossessed goods account.
2) The repossessed goods may be reconditioned by spending necessary amount which is also debited to repossessed goods and crediting cash.

## Books of Hire purchaser

1) On the date of default, entry for interest and for depreciation upto date on the asset must be passed.
2) Hire vendor's account is to be closed and any balance is transferred to the asset account.
3) Asset account is closed and any balance is transferred to profit and loss account which is the loss due to repossession of the asset.

## B) Partial repossession

When there is default on any instalment, the hire vendor may repossess the goods partially. This may be due to negotiation with the hirer who may to make some payment in future.

The hire purchaser might have depreciated the asset as per his assessment of the rate of depreciation. The hire vendor revalues the asset as per his own norms. Thus, there can be difference in the rates of depreciation charged by the hirer and the hire vendor.

While solving examination problems, it is essential to ascertain the value of goods at the time of repossession as per the hire purchaser's rate of depreciation and also the hire vendor's rate of depreciation.

## Books of Hire vendor

1) Entry for interest upto the date of default is passed
2) Repossessed goods as per hire vendor's valuation are credited to hire purchaser's account and debited to Repossessed goods A/c
3) The hire purchasers account is balanced and balance is carried down
4) Repossessed goods may be repaired and sold later on.

## Books of Hire purchaser

1) Entries for interest and depreciation on the asset are passed upto date
2) Hire vendor's $\mathrm{A} / \mathrm{c}$ is debited and asset $\mathrm{A} / \mathrm{c}$ is credited with the value of asset taken away as per hire vendor's valuation.
3) In the asset account, the remaining asset which is not taken away is shown as closing balance. This is at a value as per hire purchaser's rate of depreciation.
4) The asset account is balanced. Any balance is loss due to repossession and is transferred to Profit and Loss Account.

## Accounting treatment for goods of small sales value (Hire purchase trading account)

When numerous sales of small value are made in addition to normal sales, the hire vendor follows an alternative method of recording transactions. This method, known as 'stock method', avoids the maintenance of a separate account for each individual customer and also the tedious method of calculating interest in each case. For example, a hire vendor may be selling motor cycles, television sets, VCRs, refrigerators, radio sets, washing machines and fans on hire purchase system. These articles are of small value and are sold under varying hire-purchase agreements. The number of customers, instalments etc., is also quite large. The purchasers are individuals who do not maintain any set of books. Hence the transactions are to be recorded in the books of the vendor only. The details of all the transactions are recorded in a hire purchase sales register which is only a memorandum not forming pat of double entry.

The specimen ruling of the hire purchase sales register is as under:
Hire purchase sales register for the year ended.....................

| $\begin{aligned} & 0 \\ & \underset{\sim}{2} \\ & 6 \end{aligned}$ |  |  |  | $\begin{aligned} & 0.0 \\ & 0.0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

The totals of various columns are posted to different accounts periodically. Thus, the double entry is completed only by means of periodical totals. From the hire- purchase sales register, the following information will be collected at the end of the financial year to prepare hire purchase trading account.

## i. Stock of goods with customers:-

This is also termed as Hire purchase stock with the customer, instalments not yet due, or amount of instalments unpaid and not due. These are the total amount of those instalments in respect of goods sold on hire purchase which are to be received in the next accounting period. They have not yet become due by the end of the current accounting period. Since this information is given at hire purchase price, it must be reduced to cost price and then shown on the debit side of hire purchase trading account, if it is opening balance and shown on the credit side if it is closing balance.

## ii. Purchases (Goods sold during the year):-

The term "purchase" is used when the business is run independently. But if the business is run as a department, the information relating to purchase made by the department is given under the term 'Goods sold during the year'. Since the purchase / cost of goods sold during the year is given at the hire purchase price, it must be reduced to cost price and then shown on the debit side of hire purchase trading account.

## iii. Cash received:-

It refers to the total amount received from the customers during the accounting year in the form of down payment and amount of instalments. It is shown on the credit side of hire purchase trading account.

## iv. Total instalments due but unpaid:-

It refers to the total sum of instalments which have become due during the accounting year but has not been paid by the customers. This is also termed as 'Hire Purchase Debtors' Instalment due', 'Customers paying'. The instalment due but unpaid is shown on the debit side of hire purchase trading account if it is opening balance and is shown on the credit side if it is closing balance. In order to calculate the real sales made during the accounting year, opening balance of instalment due but unpaid is shown on the debit side of the trading account an cash received from customers and closing balance of instalment due but unpaid are shown on the credit side.

## v. Stock at shop:-

It is shown on the debit side of hire purchase trading account, but when business is run as a department, this information is not required.

## Methods of computation profit

The profit made by the vendor on hire-purchase transactions in case of goods of small value, can be calculated by any one of the following methods:
(i) Debtors method
(ii) Stock and Debtors method

## 1) Debtors Method:-

Under this method, the profit or loss made on goods sold on hire purchase can be found out by preparing hire purchase trading account. The specimen ruling of the hire purchase trading account is as under Hire purchase trading account

| To stock at shop (opening) | Xxx | By cash received from customers | xxx |
| :--- | :--- | :--- | :--- |
| To stock out with customers (at <br> cost) | Xxx | By goods repossessed | xxx |
| To instalment due but unpaid <br> (opening) | Xxx | By instalment due and unpaid <br> (closing) | xxx |
| To purchases (or) cost of goods <br> sold during the year | Xxx | By stock out with customers (at <br> cost) | xxx |
| To profit (Bal. fig) | Xxx | By stock at shop (closing) | xxx |

Note: (1) If stock out with customer is given at hire purchase price in the question, then either stock reserve equal to the excess of hire purchase price over cost price should be shown on credit side (for opening stock) and debit side (for closing stock) or it should be reduced to cost price.
(2)Stock at shop should not be shown in hire purchase trading account when business is run as a department.

## (ii) Stock and Debtors system:-

The profit made on hire purchase transactions can also be calculated according to stock and debtors system. Under this method, the following ledger accounts are to be opened:

1. Hire purchase stock account
2. Stock at shop account
3. Hire purchase debtors account
4. Goods on hire purchase account
5. Hire-purchase adjustment account

## Instalment Purchase System

Meaning: Under instalment purchase system, the property in goods passes to the purchaser immediately on signing the contract. In short, sale is outright but payment is made by different instalments. The amount of instalment and the interest payable are determined at the time of signing the contract. The seller delivers the goods to the buyer immediately after signing the contract. Since the ownership is transferred, the seller has not right to repossess the goods even if the buyer makes default in the payment of any instalment. This is also referred to as deferred instalment system.

## Accounting Treatment-Books of Buyer

The following journal entries are to be passed in the books of the buyer:-

## First Year

1. When an asset is purchased:

| Asset A/c | Dr (with cash price) |
| :--- | :--- |
| Interest Suspense A/c | Dr (with total amount of interest for all the years) |

To Vendor's A/c (with total instalment purchase price)
2. When the Down Payment is made:
Vendor's A/c
Dr
To Bank/Cash A/c
3. For Interest due at the end of the year
Interest $\mathrm{A} / \mathrm{c}$
Dr

To Interest Suspense A/c
4. For the payment of instalment:

> Vendor's A/c Dr

To Bank A/c
5. For depreciation

Depreciation A/c Dr
To Asset A/c
6.For transferring depreciation and interest accounts:

Profit \&Loss A/c
Dr
To Interest A/c
To depreciation $\mathrm{A} / \mathrm{c}$
Note: Entries (3), (4), (5) and (6) will be repeated in subsequent years.

## Books of Vendor

The following Journal entries are to be passed in the books of the vendor.

## First year

(i) When goods are sold:
Buyer's A/c
Dr (with total price)

To Sales A/c (with cash price)
To Interest Suspense A/c (with total interest for all the year)
(ii) On receipt of down payment

Bank A/c
Dr
To Buyer's A/c
(iii) For Interest due on instalment at the end of the year

> Interest Suspense A/c Dr

To Interest A/c
(iv) For receipt of the amount of instalment

Bank A/c
Dr
To Buyer's A/c
(v) For transferring Interest $\mathrm{A} / \mathrm{c}$

Interest A/c
Dr
To Profit and Loss A/c
Note: Entries for (iii) to (v) will be repeated in subsequent years.

## ILLUSTRATIONS

## Methods of Calculation of Interest

## When rate of interest, total cash price and instalments are given:

## Illustration 1

On 1-1-2018, X purchased machinery on hire purchase system. The payment is to be made Rs. 4,000 down (on signing of the contract) and Rs. 4,000 annually for three years. The cash price of the machinery is Rs. 14,900 and the rate of interest is $5 \%$. Calculate the interest in each year's instalment.
Solution:

| Particulars (1) | Total Cash Price <br> (2) | Instalment <br> Paid (3) | Interest Paid (4) | Cash price <br> Paid 5 (3 - 4) |
| :--- | :--- | :--- | :--- | :--- |
| Cash Price | $14,900.00$ |  |  | $4,000.00$ |
| Down Payment | $4,000.00$ | 4,000 |  |  |
|  | $10,900.00$ |  |  | $3,455.00$ |
| $1^{\text {st }}$ instalment | $3,3455.00$ | 4,000 | $(10,900 * 5 \%)=545$ | $3,627.75$ |
|  | $7,445.00$ |  |  |  |
| $2^{\text {nd }}$ instalment | $3,627.75$ | 4,000 | $(7,445 * 5)=372.25$ | $3,817.25$ |
| $3^{\text {rd }}$ instalament | $3,817.25$ |  |  | $14,900.00$ |
|  | $3,817.25$ | 4,000 | $(4,000-3,817.25)=182.75$ |  |

## Illustration 2

Mr. X Purchased a machine on hire purchase system Rs. 3,000 being paid on delivery and the balance in five instalments of Rs. 6,000 each, payable annually on $31^{\text {st }}$ December. The cash price of the machine was Rs. 30,000. Calculate the amount of interest for each year.

Solution:

|  | Rs. |
| :--- | ---: |
| $1^{\text {st }}$ year $=$ Amount outstanding for interest after down payment | 30,000 |
| $2^{\text {nd }}$ year $=$ Amount outstanding for interest after $1^{\text {st }}$ instalment | 24,000 |
| $3^{\text {rd }}$ year $=$ Amount outstanding for interest after $2^{\text {nd }}$ instalment | 18,000 |
| $4^{\text {th }}$ year $=$ Amount outstanding for interest after $3^{\text {rd }}$ instalment | 12,000 |
| $5^{\text {th }}$ year $=$ Amount outstanding for interest after $4^{\text {st }}$ instalment | 6,000 |

$\begin{aligned} \text { Ratio of outstanding amounts } & =5: 4: 3: 2: 1 \\ \text { Hire Purchase price } & =\text { Hire purchase price }- \text { Cash price } \\ & =\mathbf{3 3 , 0 0 0}-\mathbf{3 0 , 0 0 0}=\mathbf{3 , 0 0 0} \\ \text { Instalment outstanding Ratio } & =\mathbf{3 0 , 0 0 0}: 24,000: 18,000: 12,000: 6,000\end{aligned}$
$=5: 4 \quad: 3 \quad: 2 \quad: 1$

| Instalments | No. of outstanding Instalments | Ratio of Interest | Interest Rs. |
| :--- | :--- | :--- | :--- |
| $1^{\text {st }}$ instalment | 5 | $5 / 15$ | $3,000 * 5 / 15=1,000$ |
| $2^{\text {nd }}$ instalment | 4 | $4 / 15$ | $3,000 * 4 / 15=800$ |
| $3^{\text {rd }}$ instalment | 3 | $3 / 15$ | $3,000 * 3 / 15=600$ |
| $4^{\text {th }}$ instalment | 2 | $2 / 15$ | $3000 * 2 / 15=400$ |
| $5^{\text {th }}$ instalment | 1 | $1 / 15$ | $3,000 * 1 / 15=200$ |
|  | $\mathbf{1 5}$ |  |  |

## When cash price is not given

## Illustration 3

X purchased a typewriter on hire-purchase system. As per terms, he is required to pay Rs. 800 down, Rs. 400 at the end of the first year Rs. 300 at the end of the second year and Rs. 700 at the end of third year. Interest is charged at $5 \%$ p.a. Calculate the total cash price of the typewriter and the amount of interest payable on each instalment.

## Solution:

Each instalment paid includes interest for the period. The rate of interest on cash price must be converted to rate of interest on installment.

We assume the cash price as Rs. 100
Interest @ 5\% on Rs. 100 for one year 5
Instalment paid at the end of the year 105
i.e. interest on instalment price $5 / 105$ as a ration.

The following table is used to arrive at the cash price of the typewriter

| Year (1) | Instalment (2) | Interest paid (3) | Cash price paid 4 (2 -3) |
| :--- | :--- | :--- | :--- |
| Third year | 700 | $700 * 5 / 105=33$ | 667 |
| Second Year | 300 | $(300+667) * 5 / 105=$ <br> 46 | 254 |
| First Year | 400 | $(400+254+$ <br> $667) * 5 / 105=63$ | 337 |
| Down Payment | 800 | Nil | 800 |
|  | 142 | 2,058 |  |

Therefore, I year Rs.63: II year 46: III year Rs. 33 The Total Cash price Rs.2,058

## Illustration 4

X purchased a machine under hire purchase system. According to the terms of the agreement Rs. 40,000 was to be paid on signing of the contract. The balance was to be paid in four annual instalments of Rs. 25,000 each plus interest. The cash price was Rs.1, 40,000. Interest is chargeable on outstanding balance at $20 \%$ per annum. Calculate interest for each year and the instalment amount.

Solution:

| Date of Payment (1) | Total Cash Price (2) | Instal. Paid $(3)=(4+5)$ | Interest Paid (4) | Cash Price Paid (5) |
| :---: | :---: | :---: | :---: | :---: |
| Down Payment | 1,40,000 |  |  |  |
|  | 40,000 | 40,000 |  | 40,000 |
| $1{ }^{\text {st }}$ instalment | 1,00,000 | 45,000 | (1,00,000 * 20\%) | 25,000 |
|  |  |  | =20,000 |  |
|  | 25,000 |  |  |  |
| $2^{\text {nd }}$ instalment | 75,000 | 40,000 | $\begin{array}{r} (75,000 * 20 \%)= \\ 15,000 \end{array}$ | 25,000 |
|  | 25,000 |  |  |  |
| $3{ }^{\text {rd }}$ installment | 50,000 | 35,000 | $\begin{array}{r} (50,000 * 20 \%)= \\ 10,000 \end{array}$ | 25,000 |
|  | 25,000 |  |  |  |
| $4^{\text {th }}$ installment | 25,000 | 30,000 | $(25,000 * 20 \%)=5,000$ | 25,000 |
|  | Nil | 1,90,000 | 50,000 |  |

## Calculation of Cash Price by annuity method:

## Illustration 5:

On 1-1-90, X bought some trucks under hire-purchase system for Rs. 51,000 payable by three equal installments combining principal and interest, the latter being a normal rate of 5\% per annum. Calculate the cash price. (The present value of an annuity of one rupee for three years at $5 \%$ is Rs.2.72325).

## Solution:

The present value of annuity of Rs. 1 paid for three years @ $5 \%=2.72325$ (annuity factor)
Instalment $=51,000 / 3=17,000$
The present value of annuity =Instalment * Annuity factor

$$
=17,000 * 2.72325=46,295.25
$$

## Cash price is Rs.46,295.25

## Default and Repossession

## Illustration 6

Knight purchased a truck for Rs. 1,60,000 from S.Waugh on 1-1-93 payment to be made Rs. 40,000 down and Rs. 46,000 at the end of first year, Rs. 44,000 at the end of second year and Rs. 42,000 at the end of third year. Interest was charged at $5 \%$. Knight depreciates the truck at $10 \%$ per annum on written down value method.

Knight, after having paid down payment and first instalment at the end of the first year, could not pay second instalment. The seller took possession of the truck, and after spending Rs.4,000 on repairs of the asset, sold it away for Rs. 91,500 .

Give journal entries and ledger accounts in the books of both the parties.

Solution

| No. or instalment | Total cash price <br> paid | Inst. Paid | Interest paid | Net cash price <br> paid |
| :--- | ---: | ---: | ---: | ---: |
| Down | $1,60,000$ |  |  |  |
|  | 40,000 | 40,000 |  | 40,000 |
| $1^{\text {st }}$ instalment | $1,20,000$ |  |  | 40,000 |
| $2^{\text {nd }}$ instalment | 40,000 | 46,000 | $(1,20,000 * 5 \%)=6,000$ | 40,00 |
| $3^{\text {rd }}$ instalment | 80,000 |  |  |  |
|  | 40,000 | 44,000 | $(80,000 * 55)=4,000$ | 40,000 |
|  | 40,000 |  |  | $\mathbf{1 , 6 0 , 0 0 0}$ |

## Journal entries in the books of Knight (Hire Purchaser)

| Date |  | Dr. | 1993 |  | 1994 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dr. | Cr. | Dr. | Cr . |
| Jan. 1 | Truck A/c |  | 1,60,000 |  | - |  |
|  | To S. Waugh A/c |  |  | 1,60,000 |  | - |
|  | [Being purchase o truck on H.P] |  |  |  |  |  |
| Jan. 1 | S. Waugh A/c To Bank A/c | Dr. | 40,000 | 40,000 | - | - |
|  | [Being cash down payment] |  |  |  |  |  |
| Dec. 31 | Interest A/c To S. Waugh A/c | Dr. | 6,000 | 6,000 | 4,000 | 4,000 |
|  | [Interest credited to Hire vendor A/c] |  |  |  |  |  |
| Dec. 31 | S. Waugh A/c To Bank A/c | Dr. | 46,000 | 46,000 | - | - |
|  | [Being 1st instalment paid] |  |  |  |  |  |
| Dec. 31 | Depreciation A/c To Truck A/c | Dr. | 16,000 | 16,000 | 14,400 | 14,400 |
|  | [Being depreciation charged] |  |  | 16,000 |  |  |
| Dec. 31 | P \& L A/c | Dr. | 22,000 |  | 18,400 |  |
|  | To Interest A/c |  |  | 6,000 |  | 4,000 |
|  | To Depreciation A/c |  |  | 16,000 |  | 14,400 |
|  | [Being charge of interest \& depreciation P\&L A/c] |  |  |  |  |  |
| Dec. 31 | S. Waugh A/c To Truck A/c | Dr. | -- | - | 84,000 | 84,000 |
|  | [Being truck taken over by vendor on default] |  |  |  |  |  |
| Dec. 31 | P \& L A/c | Dr. | - |  | 45,600 |  |
|  | To Truck A/c |  |  | -- |  | 45,600 |
|  | [Loss on surrender] |  |  |  |  |  |

Ledger Accounts in the Books of S. Waugh Knight A/c

| $\begin{aligned} & 1-1-93 \\ & 31-12-93 \end{aligned}$ | To Hire Sale To interest | $\begin{aligned} & \text { Rs. } \\ & 1,60,000 \end{aligned}$ | $\begin{aligned} & 1-1-93 \\ & 31-12-93 \end{aligned}$ | By Bank (Down payment) <br> By Bank | $\begin{aligned} & \text { Rs. } \\ & 40,000 \\ & 46,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 1-1-94 | To Balance b/d <br> To Interest | 60,000 $1,66,000$ | 31-12-94 | By Repossessed stock A/c (Bal.fig) (transfer) | 1,66,000 |
|  |  | 80,000 |  |  | 84,000 |
|  |  | 4,000 |  |  | 84,000 |
|  |  | 84,000 |  |  | 84,000 |

## Repossessed stock A/c

| $\begin{aligned} & 31-12-94 \\ & 31-12-94 \end{aligned}$ | To Cash <br> To Knight A/c To P\&L A/c (Bal. fig) (Profit of sale) | Rs. | 31-12-94 | By cash | Rs.$91,500$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 4,000 |  |  |  |
|  |  | 84,000 |  |  |  |
|  |  | 3,500 |  |  |  |
|  |  | 91,500 |  |  | 91,500 |

Ledger A/c's in the books of Knight Truck A/c

| 1-1-93 | To Hire Vendor A/c | Rs. | 31-12-93 | By Depreciation A/c <br> By Balance C/d | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1,60,000 |  |  | 16,000 |
|  |  |  |  |  | 1,44,000 |
|  |  | 1,60,000 |  |  | 1,60,000 |
| 1-1-94 | To Balance b/d | 1,44,000 | 31-12-93 | By Depreciation A/c <br> By S. Waugh A/c <br> By P\&L A/c (Bal. fig) | 14,400 |
|  |  |  |  |  | 84,000 |
|  |  |  |  |  | 45,600 |
|  |  | 1,44,000 |  |  | 1,44,000 |

## S. Waugh A/c

| $\begin{aligned} & 1-1-93 \\ & 31-12-93 \end{aligned}$ | To Bank A/c <br> To Bank A/c (1st) <br> To Balance C/d | Rs. | $\begin{aligned} & 1-1-93 \\ & 31-12-93 \end{aligned}$ | By Truck A/c <br> By Interest A/c | $\begin{array}{\|r\|} \hline \text { Rs. } \\ 1,60,000 \\ 6,000 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 40,000 |  |  |  |
|  |  | 46,000 |  |  |  |
|  |  | 80,000 |  |  |  |
|  |  | 1,66,000 |  | By Balance b/d <br> By Interest A/c | 1,66,000 |
| 31-12-94 | To Truck A/c (Bal. fig) (transfer) | 84,000 | $\begin{aligned} & 1-1-94 \\ & 31-12-94 \end{aligned}$ |  | 80,000 |
|  |  |  |  |  | 4,000 |
|  |  | 84,000 |  |  | 84,000 |

Journal entries in the books of S. Waugh (Hire Vendor)

| Date | Knight A/c | Dr. | 1993 |  | 1994 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dr. | Cr . | Dr. | Cr. |
| Jan. 1 |  |  | 1,60,000 |  | - |  |
|  | To Hire sale A/c |  |  | 1,60,000 |  | - |
|  | [Being truck sold on H.P.] |  |  |  |  |  |
| Jan. 1 | Bank A/c To Knight A/c | Dr. | 40,000 | 40,000 | - | - |
|  | [Being down payment received] |  |  |  |  |  |
| Dec. 31 | Knight A/c <br> To Interest A/c | Dr. | 6,000 | 6,000 | 4,000 | 4,000 |
|  | [Being interest charged to Knight] |  |  |  |  |  |
| Dec. 31 | Bank A/c <br> To S. Waugh A/c | Dr. | 46,000 | 46,000 | - | - |
|  | [Being 1st instalment received] |  |  |  |  |  |
| Dec. 31 | Interest A/c <br> To P \& L A/c | Dr. | 6,000 | 6,000 | 4,000 | 4,000 |
|  | [Being interest transferred to $\mathrm{P} \& \mathrm{~L}$ A/c] |  |  |  |  |  |
| Dec. 31 | Repossessed Stock A/c <br> To Knight A/c | Dr. | - | - | 84,000 | 84,000 |
|  | [Truck seized from buyer on default] |  |  |  |  |  |
| Dec. 31 | Repossessed Stock A/c <br> To Cash A/c <br> [Being amount spend on repaid] | Dr. | - | - | 4,000 | 4,000 |


| Dec.31 | Cash A/c <br> To Repossessed Stock A/c <br> [Being repossessed truck sold <br> away] <br> Depossessed Stock A/c <br> To P \& L A/c <br> [Profit on sale of repossessed <br> truck] | Dr. | - | - | 91,500 | 91,500 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## QUESTION BANK

## SECTION -A

1. Define the term 'Down payment'
2. Who is Hire vendor?
3. What is Hire purchase price?
4. Define the term 'Default'.
5. What is Repossession?
6. Write a short note on complete repossession.
7. What is Instalment purchase system.
8. Raman purchases a motor car from Bharathan whose cash price is Rs. 56,000 on 1.1.2012. Rs. 15,000 is paid on signing the contact and the balance is to be paid in three equal annual instalment of Rs. 15,000 each. The rate of interest is $5 \%$ p.a. Calculate the amount of interest included in each instalment.
9. X purchased a typewriter in hire-purchase system. As per terms, he is required to pay Rs. 800 down, Rs. 400 at the end of the first years. 300 at the end of the second year and 700 at the end of the third year. Interest is charged at $5 \%$ p.a. Calculate the total cash price of the typewriter and the amount of interest payable on each instalment.

## SECTION -B

1. Distinguish between Hire purchase and Instalment purchase systems.
2. What are the various important terms in Hire purchase system?
3. Discuss the main features of Hire purchase systems.
4. Explain the Types of Repossession in Hire purchase systems.
5. Mr. Raju purchased 4 cars for Rs. 14,000 each on 1-1-2010 under the hire purchase system. The hire purchase price for all the 4 cars was Rs. 60,000 to be paid as Rs. 15,000 down payment and 3 equal instalment of Rs. 15,000 each at the end of each year. Interest is charged at 5\% p.a. The buyer depreciates the car at $10 \%$ p.a. on straight line method.From the above particulars give journal entries in the books of Mr. Raju.
6. 'Modern' Ltd sold a lorry to Arun on Hire purchase system. The cash price was Rs. $7,45,000$. Rs.2,00,000 was to be paid on delivery and the balance in three instalments
of Rs. 2,00,000. Each at the end of each year. Modern Ltd charged interest of 5\% p.a. Arun depreciates the lorry at $10 \%$ per annum on reducing balance method.Prepare journal entries in the books of Hire purchaser.
7. The Madras Trading co. purchased a motor car from Bombay Motor Co. on hire purchase Agreement on 1-1-2009, paying cash Rs. 10,000 and agreeing to pay further three instalment of Rs. 10,000 each on $31^{\text {ST }}$ December each year. The cash price of the car is Rs. 37.250 and the Bombay Motor Co. charges interest at $5 \%$ p.a.The Madras Trading Co. writes off $10 \%$ p.a. as depreciation on the reducing balance method. Journalize the above in the books of Hire vendors.
8. Knight purchased a truck for Rs. 1,60,000 from S.Wauagh on 1-1-2009 payment to be made Rs. 40,000 .down and Rs. 46,000 at the end of first year, Rs. 44,000 at the end of second year and Rs, 42,000 at the end of third year. Interest was charged at $5 \%$.Knight depreciates the truck at $10 \%$ per annum on written down value method.

Knight after having paid down payment and first instalment at the end of the first year, could not pay second instalment. The seller took possession of the truck, and after spending Rs.4,000 on repairs of the asset, sold it away for Rs.91,500. Give journal entries in the books of Hire purchaser.
9. Sunder sells goods on H.P system at cost plus $60 \%$. From the following prepare Hire purchase

Trading account.

|  | Rs |
| :--- | :--- |
| Jan 1 Goods on H.P system at H.P price | 32,000 |
| Dec 31 Instalment not due and unpaid | 72,000 |
| Instalment due and unpaid | 4,000 |
| The following transactions took place during the year | $1,60,000$ |
| a) Goods sold on H.P price | $1,12,000$ |
| b) Cash received from customer at H.P price <br> c) Goods received back on default valued at(instalment <br> due Rs. 4,000) | 800 |

10.From the following details, set out the Hire purchase Trading account in the books of a trader who sells a number of articles of comparatively small value daily on the hire purchase system, showing his profit on this department of the business for the year ended 31-12-2012. For the purpose of charging his hire purchase customers, he adds $60 \%$ to the cost of the goods.

|  | Rs |
| :---: | :---: |
| $1.1 .2012 \quad$ Stock in customers hands at selling price | 1,620 |
| 31.12 .2012 Sale of goods on hire purchase during the year at selling price | 6,534 |
| Cash received from hire purchase customers at selling price | 2,100 |
| Stock in customers hand at selling price | 4,674 |
| Goods repossessed (Instalments due Rs.1,000) valued at | 250 |

## SECTION - C

1. A Company purchased two machines of ₹ 10,500 each on hire purchase system, paying 6,000 down and remainder in three equal installments of ₹ 5,000 each together with interest at $5 \%$ p.a. The company writes off depreciation at $10 \%$ p.a. according to Diminishing Balance Method. The company could not pay the second installment. The vendor left one machine with the company adjusting the value of the other against amount due taking the machine at $20 \%$ depreciation at Diminishing Balance Method. Prepare Ledger Account in the company's books.
2. X purchased from Y three cars costing ₹ $1,00,000$ each on hire purchase system. Payment was to be made; 60,000 down and balance in three equal installments together with interest at $15 \%$ per annum. X provides depreciation at $20 \%$ per annum on diminishing balance method. X paid the first installment at the end of the first year but could not pay the second installment, Y took possession of all the three cars. He spent ₹ 18,000 on repairs and sold them for ₹ $1,50,000$. Show the necessary ledger account in the books of both the parties
3. X purchased a machine for manufacturing steel utensils on hire purchase system from Y. Payment was to be made as ₹ 18,000 at contract and three annual installments of 18,000 each. Interest charged @ $20 \%$ p.a. which was included in the annual payments of ₹ 18,000 . Depreciation charged by X was $10 \%$ on straight-line method.
Calculate the Cash Price of the Machine and prepare Machine Account and Y's Account in the books of X.

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3. M. Hanif \& A. Mukherjee, Financial Accounting I, McGraw Hill Education, 4th Edition, 2018.
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## SCHOOL OF MANAGEMENT STUDIES

## UNIT IV- PARTNERSHIP

## PARTNERSHIP:

When two or more persons join hands to set up a business and share its profits and losses, they are said to be in partnership. Section 4 of 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'.

## FEATURES OF PARTNERSHIP

## 1. Two or More Persons:

In order to form partnership, there should be at least two persons coming together for a common goal. In other words, the minimum number of partners in a firm can be two. There is however, a limit on their maximum number. By virtue of Section 464 of the Companies Act 2013, the Central Government is empowered to prescribe maximum number of partners in a firm but the number of partners cannot be more than 100. The Central government has prescribed the maximum number of partners in a firm to be 50 under Rule 10 of the Companies (Miscellaneous) Rules, 2014, So, a partnership firm cannot have more than 50 partners.

## 2. Agreement:

Partnership is the result of an agreement between two or more persons to do business and share its profits and losses. The agreement becomes the basis of relationship between the partners. It is not necessary that such agreement is in written form. An oral agreement is equally valid. But in order to avoid disputes, it is preferred that the partners have a written agreement.

## 3. Business:

The agreement should be to carry on some business. Mere co-ownership of a property does not amount to partnership. For example, if Rohit and Sachin jointly purchase a plot of land, they become the joint owners of the property and not the partners. But if they are in the business of purchase and sale of land for the purpose of making profit, they will be called partners.

## 4. Mutual Agency:

The business of a partnership concern may be carried on by all the partners or any of them acting for all. This statement has two important implications. First, every partner is entitled to participate in the conduct of the affairs of its business. Second, that there exists a relationship of mutual agency between all the partners. Each partner carrying on the business is the principal as well as the agent for all the other partners. He can bind other partners by his acts and also is bound by the acts of other partners with regard to business of the firm. Relationship of mutual agency is so important that one can say that there would be no partnership, if the element of mutual agency is absent.

## 5. Sharing of Profit:

Another important element of partnership is that, the agreement between partners must be to share profits and losses of a business. Though the definition contained in the Partnership Act describes partnership as relation between people who agree to share the profits of a business, the sharing of loss is implied. Thus, sharing of profits and losses is important. If some persons join hands for the purpose of some charitable activity, it will not be termed as partnership.

## 6. Liability of Partnership:

Each partner is liable jointly with all the other partners and also severally to the third party for all the acts of the firm done while he is a partner. Not only that the liability of a partner for acts of the firm is also unlimited. This implies that his private assets can also be used for paying off the firm's debts.

## PARTNERSHIP DEED

Partnership comes into existence as a result of agreement among the partners. The agreement can be either oral or written. The Partnership Act does not require that the agreement must be in writing. But wherever it is in writing, the document, which contains terms of the agreement is called 'Partnership Deed'.

## Contents of the Partnership Deed

The Partnership Deed usually contains the following details:

- Names and Addresses of the firm and its main business;
- Names and Addresses of all partners;
- Amount of capital to be contributed by each partner;
- The accounting period of the firm;
- The date of commencement of partnership;
- Rules regarding operation of Bank Accounts;
- Profit and loss sharing ratio;
- Rate of interest on capital, loan, drawings, etc;
- Mode of auditor's appointment, if any;
- Salaries, commission, etc, if payable to any partner;
- The rights, duties and liabilities of each partner;
- Treatment of loss arising out of insolvency of one or more partners;
- Settlement of accounts on dissolution of the firm;
- Method of settlement of disputes among the partners;
- Rules to be followed in case of admission, retirement, death of a partner; and
- Any other matter relating to the conduct of business


## PROVISIONS RELEVANT FOR ACCOUNTING

The important provisions affecting partnership accounts are as follows:
(a) Profit Sharing Ratio: If the partnership deed is silent about the profit-sharing ratio, the profits and losses of the firm are to be shared equally by partners, irrespective of their capital contribution in the firm.
(b) Interest on Capital: No partner is entitled to claim any interest on the amount of capital contributed by him in the firm as a matter of right. However, interest can be allowed when it is expressly agreed to by the partners. Thus, no interest on capital is payable if the partnership deed is silent on the issue. Further the interest is payable only out of the profits of the business and not if the firm incurs losses during the period.
(c) Interest on Drawings: No interest is to be charged on the drawings made by the partners, if there is no mention in the Deed.
(d) Interest on Advances: If any partner has advanced some money to the firm beyond the amount of his capital for the purpose of business, he shall be entitled to get an interest on the amount at the rate of 6 per cent per annum.
(e) Remuneration for Firm's Work: No partner is entitled to get salary or other remuneration for taking part in the conduct of the business of the firm unless there is a provision for the same in the Partnership Deed.

## CAPITAL ACCOUNTS OF PARTNERS

All transactions relating to partners of the firm are recorded in the books of the firm through their capital accounts. This includes the amount of money brought in as capital, withdrawal of capital, share of profit, interest on capital, interest on drawings, partner's salary, commission to partners, etc.

There are two methods by which the capital accounts of partners can be maintained. These are:
(i) Fixed capital method, and
(ii) Fluctuating capital method.
i) Fixed Capital Method: Under the fixed capital method, the capitals of the partners shall remain fixed unless additional capital is introduced or a part of the capital is withdrawn as per the agreement among the partners

All items like share of profit or loss, interest on capital, drawings, interest on drawings, etc. are recorded in a separate account, called Partner's Current Account. The partners' capital accounts will always show a credit balance, which shall remain the same (fixed) year after year unless there is any addition or withdrawal of capital. The partners' current account on the other hand, may show a debit or a credit balance. Thus under this method, two accounts are maintained for each partner viz., capital account and current account, While the partners' capital accounts shall always appear on the liabilities side in the balance sheet, the partners' current account's balance shall be shown on the liabilities side, if they have credit balance and on the assets side, if they have debit balance

|  | Dr | Partner's Capital Account |  |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | Amount (Rs.) | Date | Particulars | JF | Amount (Rs.) |
|  | Bank (permanent withdrawal of capital) |  | XXX |  | Balance c/d (Opening balance) |  | XXX |
|  | Balance c/d (closing balance) |  | XXX |  | Bank (fresh capital introduced) |  | XXX |
|  |  |  | XXX |  |  |  | XXX |


| Dr |  |  | Partner's Current Account |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | Amount (Rs.) | Date | Particulars | JF | Amount (Rs.) |
|  | Balance b/d (in case of debit opening bal,) |  | XXX |  | Balance b/d (in case of credit opening balance) |  | XXX |
|  | Drawings |  | XXX |  | Salary |  | XXX |
|  | Interest on drawings |  | XXX |  | Commission |  | XXX |
|  | Profit \& Loss a/c |  | XXX |  | Interest on capital |  | XXX |
|  | Balance c/d (in case of credit closing balance) |  | XXX |  | Profit \& Loss Appropriation (share of profit) |  | XXX |
|  |  |  |  |  | Balance c/d (in case of debit |  | XXX |


|  |  |  |  | closing bal,) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | XXX |  |  |  | XXX |

ii) Fluctuating Capital Method: Under the fluctuating capital method, only one account, i.e. capital account is maintained for each partner. All the adjustments such as share of profit and loss, interest on capital, drawings, interest on drawings, salary or commission to partners, etc are recorded directly in the capital accounts of the partners. This makes the balance in the capital account to fluctuate from time to time. That's the reason why this method is called fluctuating capital method. In the absence of any instruction, the capital account should be prepared by this method. The proforma of capital accounts prepared under the fluctuating capital method is given below:

| Dr |  |  | Partner's Capital Account |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | $\begin{aligned} & \hline \mathbf{J} \\ & \mathbf{F} \\ & \hline \end{aligned}$ | Amount (Rs.) | $\begin{aligned} & \text { Dat } \\ & \text { e } \end{aligned}$ | Particulars | $\begin{aligned} & \hline \mathbf{J} \\ & \mathbf{F} \\ & \hline \end{aligned}$ | Amount (Rs.) |
|  | Drawings |  | XXX |  | Balance b/d |  | XXX |
|  | Interest on drawings |  | XXX |  | Bank (fresh capital introduced) |  | XXX |
|  | Profit \& Loss a/c (for share of loss) |  | XXX |  | Salaries |  | XXX |
|  | Balance c/d |  | XXX |  | Interest on Capital |  | XXX |
|  |  |  |  |  | Profit \& Loss <br> Appropriation (share of profit) |  | XXX |
|  |  |  | XXX |  |  |  | XXX |

Illustration : 1
Amit, Babu and Charu set up a partnership firm on April 1, 2015. They contributed Rs. 50,000 , Rs. 40,000 and Rs. 30,000 , respectively as their capitals and agreed to share profits and losses in the ratio of $3: 2: 1$. Amit is to be paid a salary of Rs. 1,000 per month and Babu, a Commission of Rs. 5,000. It is also provided that interest to be allowed on capital at $6 \%$ p.a. The drawings for the year were Amit Rs. 6,000, Babu Rs. 4,000 and Charu Rs. 2,000. Interest on drawings of Rs. 270 was charged on Amit's drawings, Rs. 180 on Babu's drawings and Rs. 90, on Charu's drawings. The net profit as per Profit and Loss Account for the year
ending March 31, 2015 was Rs. 35,660. Prepare the Profit and Loss Appropriation Account to show the distribution of profit among the partners.

| Dr Profit and Lo | Profit and Loss Appropriation Account |  | Cr |
| :---: | :---: | :---: | :---: |
| Particulars | Amount (Rs.) | Particulars | Amount (Rs.) |
| Amits' salary | 12,000 | Net profit | 35,660 |
| Babus' commission | 5,000 | Interest on drawings: |  |
| Interest on Capitals : |  | Amit 270 |  |
| Amit 3,000 |  | Babu 180 |  |
| Babu 2,400 |  | Charu 90 | 540 |
| Charu 1,800 | 7,200 |  |  |
| Share of profit transferred to Capital accounts |  |  |  |
| Amit 6,000 |  |  |  |
| Babu 4,000 |  |  |  |
| Charu 2,000 | 12,000 |  |  |
|  | 36,200 |  | 36,200 |

## Illustration :2

Mahesh and Dinesh share profits and losses in the ratio of 2:1. From January 01, 2014 they admit Rakesh into their firm who is to be given a share of $1 / 10$ of the profits with a guaranteed minimum of Rs. 25,000 . Mahesh and Dinesh continue to share profits as before but agree to bear any deficiency on account of guarantee to Rakesh in the ratio of 3:2 respectively. The profits of the firm for the year ending December 31, 2015 amounted to Rs. 1,20,000. Prepare Profit and Loss Appropriation Account.

| Dr Profit and Loss Appropriation Account |  |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Amount (Rs.) | Amount (Rs.) | Particul ars | Amount (Rs.) | Amount (Rs.) |
| Capital Accounts: (for share of profit) |  |  | Net profit |  | 1,20,000 |
| Mahesh ( $6 / 10 \times 1,20,000$ ) | 72,000 |  |  |  |  |
| Less: Deficiency share | 7,800 | 64,200 |  |  |  |
| Dinesh(3/10 $\times 1,20,000$ ) | 36,000 |  |  |  |  |
| Less: Deficiency share | 5,200 | 30,800 |  |  |  |
| Rakesh | 12,000 |  |  |  |  |
| Add: Share of Deficiency from |  |  |  |  |  |
| Mahesh | 7,800 |  |  |  |  |
| Dinesh | 5,200 | 25,000 |  |  |  |
|  |  | 1,20,000 |  |  | 1,20,000 |

## Working Notes:

New profit-sharing Ratio will be calculated as follows:
Rakesh to share $1 / 10$ of the profits. The remaining profit $9 / 10$ will be shared by Mahesh and Dinesh in the ratio of $2: 1$.
Mahesh's share in profit will be $2 / 3 * 9 / 10=3 / 10$
Dinesh's share will be $1 / 3^{*} 9 / 10=3 / 10$
The New ratio becomes $3 / 5: 3 / 10: 1 / 10$ or $6: 3: 1$
Mahesh's share in profit $=1,20,000 \times 6 / 10=$ Rs. 72,000 ,
Dinesh's share in profit $=$ Rs. 36,000 ,
Rakesh's share in profit = Rs. 12,000.
Deficiency of Rakesh (Rs. 13,000) will be shared by Mahesh and Dinesh in the ratio of 3:2.
Mahesh will bear $3 / 5$ of 13,000 , i.e. Rs. 7,800 and Rakesh, $2 / 5$ of Rs. 13,000 , i.e. Rs. 5,200.
Thus, the profits of the firm will be shared as follows.
Mahesh will get Rs. 72,000 - Rs. 7,800 = Rs. 64,200.
Dinesh will get Rs. 36,000 - Rs. 5,200 = Rs. 30,800
Rakesh will get Rs. 12,000 + Rs. 7,800 + Rs. 5,200 = Rs. 25,000 .

## Illustration :3

Final Accounts
Kapil and Vineet were partners sharing profits and losses in the ratio of 3:2. The following balances were extracted from the books of account for the year ended March 31, 2017

| Particulars | Debit (Rs.) | Credit (Rs.) |
| :--- | ---: | ---: |
| Capitals Kapil | - | 60,000 |
| Capitals Vineet | Kapil | - |
| Current accounts (on April 01, 2013) | - | 50,000 |
|  | Vineet | - |
| Drawings: | Kapil | 12,000 |
|  | Vineet | 8,000 |
| Stock as on 1.4.2016 |  | 11,000 |
| Purchases and Sales | 54,000 | 1,600 |
| Returns | 2,000 | - |
| Wages | 2,500 | - |
| Salaries | 4,000 | - |
| Printing and Stationery | 500 | 80,000 |
| Bills receivables | 12,000 | 1,500 |
| Bills payables | -- | - |
| Debtors and Creditors | 36,000 | - |
| Discounts | 1,200 | - |
| Rent and Rates | 800 | 2,000 |
| Bad debts | 1,400 | 8,000 |
| Insurance | 400 | 1,500 |
| Postage and Telegrams | 300 | - |
| Salesman's commission | 3,400 | - |
| Land and Building | 24,000 | - |
| Plant and Machinery | 20,000 | - |
| Furniture | 13,500 | - |


| Overdraft | - | 2,000 |
| :--- | ---: | ---: |
| Trade expenses | 400 | - |
| Cash in hand | 500 | - |
| Cash at bank | 1,500 | - |
|  | $2,09,400$ | $2,09,400$ |

Prepare the final accounts for the year ended March 31, 2017 firm taking into consideration the following:

1) Stock on March 31, 2017 was Rs. 18,000 ;
2) Provision for doubtful debts is to be provided at $5 \%$ on debtors;
3) Outstanding salaries were Rs. 1,000 ;
4) Goods worth Rs. 8,000 were destroyed by fire on December 10, 2016. The Insurance Company agreed to pay Rs. 7,000 in full settlement of the claim;
5) Interest on capitals is allowed at $6 \%$ per annum and interest on drawings is also charged at $6 \%$ per annum;
6) Kapil is entitled to a Salary of Rs. 1,200 per annum;
7) Write-off Land and buildings at $5 \%$, Furniture at $10 \%$ and Plant and Machinery at $15 \%$.

## Solution:

Trading and Profit \& Loss Account for the year ending March 31, 2017

| Particulars | Amount (Rs.) | Amount (Rs.) | Particulars | $\begin{aligned} & \text { Amount } \\ & \text { (Rs.) } \end{aligned}$ | Amount (Rs.) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Opening stock |  | 11,000 | Sales | 80,000 |  |
| Purchases | 54,000 |  | Less: Returns | 2,000 | 78,000 |
| Less: Returns | 1,500 | 52,500 | Closing stock |  | 18,000 |
| Wages |  | 2,500 | Goods destroyed by fire |  | 8,000 |
| Gross Profit c/d |  | 38,000 |  |  |  |
|  |  | 1,04,000 |  |  | 1,04,000 |
| Salaries | 4,000 |  | Gross Profit b/d |  | 38,000 |
| Add: Outstanding | 1,000 | 5,000 | Discount received |  | 1,500 |
| Printing and Stationery |  | 500 |  |  |  |
| Rent and Rates |  | 800 |  |  |  |
| Insurance |  | 400 |  |  |  |
| Discount allowed |  | 1,200 |  |  |  |
| Trade expenses |  | 400 |  |  |  |
| Postage and Telegrams |  | 300 |  |  |  |
| Bad debts | 1,400 |  |  |  |  |
| Add: Provision | 1,800 | 3,200 |  |  |  |
| Salesman's commission |  | 3,400 |  |  |  |
| Loss due to fire (Rs. 8000-Rs. 7000) |  | 1,000 |  |  |  |
| Depreciation: |  |  |  |  |  |
| Land and Buildings | 1,200 |  |  |  |  |
| Furniture | 1,350 |  |  |  |  |
| Plant and Machinery | 3,000 | 5,550 |  |  |  |


| Net Profit <br> transferred to Profit <br> and Loss |  | 17,750 |  |  |
| :--- | :--- | ---: | :--- | :--- |
| Appropriation |  |  |  |  |$\quad$|  |  | $\mathbf{3 9 , 5 0 0}$ |  |
| :--- | ---: | :--- | :--- |
| $\mathbf{3 9 , 5 0 0}$ |  |  |  |


| Dr | Profit and Loss Appropriation Account |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Amount (Rs.) | Amount (Rs.) | Particulars | Amount (Rs.) | Amount (Rs.) |
| Interest on capital: |  |  | Profit and Loss |  | 17,750 |
| Kapil | 3,600 |  | Interest on drawings:(for 6 months) |  |  |
| Vineet | 3,000 | 6,600 | Kapil | 360 |  |
| Salary to Kapil |  | 1,200 | Vineet | $\underline{240}$ | 600 |
| Net profit (transferred to capital accounts) |  |  |  |  |  |
| Kapil | 6,330 |  |  |  |  |
| Vineet | 4,220 | 10,550 |  |  |  |
|  |  | 18,350 |  |  | 18,350 |


| Dr |  |  |  | Partner's Current Accounts |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | :--- | :--- | ---: | ---: | :---: |
| Date | Particulars | J.F. | Kapil <br> (Rs.) | Vineet <br> (Rs.) | Date | Particulars | J.F. | Kapil <br> (Rs.) | Vineet <br> (Rs.) |  |  |
|  | Drawings |  | 12,000 | 8,000 |  | Balance b/d |  | 2,800 | 1,600 |  |  |
|  | Interest on <br> drawings |  | 360 | 240 |  | Interest on <br> capital |  | 3,600 | 3,000 |  |  |
|  | Balance c/d |  | 1,570 | 580 |  | Salary |  | 1,200 | - |  |  |
|  |  |  |  |  |  | Share of <br> profit |  | 6,330 | 4,220 |  |  |
|  |  |  | 13,930 | 8,820 |  |  |  | 13,930 | 8,820 |  |  |
|  |  |  |  |  |  | Balance c/d |  | 1,570 | 580 |  |  |

Balance Sheet as on March 31, 2017

| Liabilities | Amount <br> (Rs.) | Amount <br> $($ Rs. $)$ | Assets | Amount <br> (Rs.) | Amount <br> (Rs.) |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Capital: |  |  | Land and Building | 24,000 |  |
| Kapil | 60,000 |  | Less: Depreciation | $\underline{1,200}$ | 22,800 |
| Vineet | 50,000 | $1,10,000$ | Plant and Machinery | 20,000 |  |
| Current <br> Accounts |  |  | Less: Depreciation | 3,000 | 17,000 |
| Kapil | 1,570 |  | Furniture | 13,500 |  |
| Vineet | 580 | 2,150 | Less: Depreciation | 1,350 | 12,150 |
| Overdraft |  | 2,000 | Stock |  | 18,000 |
| Bill payables |  | 2,000 | Debtors | 36,000 |  |
| Creditors |  | 8,000 | Less: Provision for | $\underline{1,800}$ | 34,200 |
| Outstanding |  | 1,000 | discount on debtors |  | 7,000 |


| salaries |  |  | Insurance company |  |  |
| :--- | ---: | ---: | :--- | :--- | ---: |
|  |  |  | Bill receivables |  | 12,000 |
|  |  |  | Cash at bank |  | 1,500 |
|  |  |  | Cash in hand |  | 500 |
|  |  | $1,25,150$ |  |  | $1,25,150$ |

## Admission of a New Partner

When firm requires additional capital or managerial help or both for the expansion of its business a new partner may be admitted to supplement its existing resources. According to the Partnership Act 1932, a new partner can be admitted into the firm only with the consent of all the existing partners unless otherwise agreed upon. With the admission of a new partner, the partnership firm is reconstituted and a new agreement is entered into to carry on the business of the firm.

A newly admitted partner acquires two main rights in the firm-

1. Right to share the assets of the partnership firm; and
2. Right to share the profits of the partnership firm.

For the right to acquire share in the assets and profits of the partnership firm, the partner brings an agreed amount of capital either in cash or in kind. Moreover, in the case of an established firm which may be earning more profits than the normal rate of return on its capital the new partner is required to
contribute some additional amount known as premium or goodwill. This is done primarily to compensate the existing partners for loss of their share in super profits of the firm.
Following are the other important points which require attention at the time of admission of a new partner:

- New profit-sharing ratio;
- Sacrificing ratio;
- Valuation and adjustment of goodwill;
- Revaluation of assets and Reassessment of liabilities;
- Distribution of accumulated profits (reserves); and
- Adjustment of partners' capitals.


## Illustration : 4

Anil and Vishal are partners sharing profits in the ratio of 3:2. They admitted Sumit as a new partner for $1 / 5$ share in the future profits of the firm. Calculate new profit sharing ratio of Anil, Vishal and Sumit.

Solution:

Remaining share $=1-(1 / 5)=4 / 5$
Anil's new share $=3 / 5$ of $4 / 5=12 / 25$
Vishal's new share $=2 / 5$ of $4 / 5=8 / 25$
New profit sharing ratio of Anil, Vishal and Sumit will be 12:8:5.

## Illustration : 5

Anshu and Nitu are partners sharing profits in the ratio of 3:2. They admitted Jyoti as a new partner for $3 / 10$ share which she acquired $2 / 10$ from Anshu and $1 / 10$ from Nitu. Calculate the new profit-sharing ratio of Anshu, Nitu and Jyoti.
Jyoti's share $=3 / 10$
Anshu's new share $=3 / 5-2 / 10=4 / 10$
Nitu's new share $=$ Old share - Share Surrendered

$$
=2 / 5-1 / 10=3 / 10
$$

The new profit sharing ratio between Anshu, Nitu and Jyoti will be $4: 3: 3$.

## SACRIFICING RATIO

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

Old Share of Profit - New Share of Profit
As stated earlier, the new partner is required to compensate the old partner's for their loss of share in the super profits of the firm for which he brings in an additional amount known as premium or goodwill. This amount is shared by the existing partners in the ratio in which they forego their shares in favour of the new partner which is called sacrificing ratio.
The ratio is normally clearly given as agreed among the partners which could be the old ratio, equal sacrifice, or a specified ratio. The difficulty arises where the ratio in which the new partner acquires his share from the old partners is not specified. Instead, the new profit sharing ratio is given. In such a situation, the sacrificing ratio is to be worked out by deducting each partner's new share from his old share.

## Illustration : 6

Ramesh and Suresh are partners in a firm sharing profits in the ratio of 4:3. They admitted
Mohan as a new partner. The profit-sharing ratio of Ramesh, Suresh and Mohan will be 2:3:1.
Calculate the gain or sacrifice of old partner.
Ramesh's old share $=4 / 7$
Ramesh's new share $=2 / 6$
Ramesh's sacrifice $=4 / 7-2 / 6=10 / 42$
Suresh's new share $=3 / 6$

Suresh's old share $=3 / 7$
Suresh's gain $=3 / 6-3 / 7=3 / 42$
Mohan's share $=1 / 6$ or $7 / 42$
Ramesh's sacrifice $=$ Suresh's gain + Mohan's gain $=3 / 42+7 / 42=10 / 42$

## GOODWILL

Goodwill is also one of the special aspects of partnership accounts which requires adjustment (also valuation if not specified) at the time of reconstitution of a firm viz., a change in the profit sharing ratio, the admission of a partner or the retirement or death of a partner.

## FACTORS AFFECTING THE VALUE OF GOODWILL

The main factors affecting the value 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, trademarks, etc. enjoy higher value of goodwill.

## Methods of Valuation of Goodwill

Since goodwill is an intangible asset it is very difficult to accurately calculate its value. Various methods have been advocated for the valuation of goodwill of a partnership firm. Goodwill calculated by one method may differ from the goodwill calculated by another method. Hence, the method by which goodwill is to be calculated, may be specifically decided between the existing partners and the incoming partner.
The important methods of valuation of goodwill are as follows:

1. Average Profits Method
2. Super Profits Method
3. Capitalisation Method

## 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.

## Illustration : 7

The profit for the five years of a firm are as follows - year 2013 Rs. 4,00,000; year 2014 Rs. 3,98,000; year 2015 Rs. 4,50,000; year 2016 Rs. 4,45,000 and year 2017 Rs. 5,00,000. Calculate goodwill of the firm on the basis of 4 years purchase of 5 years average profits

| Year Profit | (Rs.) |
| :---: | :---: |
| 2013 | $4,00,000$ |
| 2014 | $3,98,000$ |
| 2015 | $4,50,000$ |
| 2016 | $4,45,000$ |
| 2017 | $5,00,000$ |
| Total | $21,93,000$ |

Average Profit $=$ TotalProfit of Last 5 Years $/$ No.of years $=21,93,000 / 5=$ Rs. 4,38,600
Goodwill $=$ Average Profits $\times$ No. of years purchased

$$
=\text { Rs. } 4,38,600 \times 4=\text { Rs. } 17,54,400
$$

## SUPER PROFITS METHOD

The basic assumption in the average profits (simple or weighted) 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'. But it is 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.

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. $15,000(1,50,000 \times 10 / 100)$. The super profits in this case will be Rs. 3,000 (Rs. 18,000-15,000). The goodwill under the super profit 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 $\times$ 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 : 8

The books of a business showed that the capital employed on December 31, 2015, Rs. 5,00,000 and the profits for the last five years were: 2010-Rs. 40,000: 2012-Rs. 50,000; 2013-Rs. 55,000; 2014-Rs.70,000 and 2015-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 $10 \%$.

$$
\begin{aligned}
\text { Normal Profits }= & \frac{\text { Capital Employed } \times \text { Normal Rate of Return }}{100} \\
& =\text { Rs. } \frac{5,00,000 \times 10}{100}=\text { Rs. } 50,000
\end{aligned}
$$

Average Profits:

| Year | Profit <br> (Rs.) |
| :---: | :---: |
| 2011 | 40,000 |
| 2012 | 50,000 |
| 2013 | 55,000 |
| 2014 | 70,000 |
| 2015 | 85,000 |
| Total | $3,00,000$ |


| Average Profits | $=$ Rs. $3,00,000 / 5=$ Rs. 60,000 |
| :--- | :--- |
| Super Profit | $=$ Rs. $60,000-$ Rs. $50,000=$ Rs. 10,000 |
| Goodwill | $=$ Rs. $10,000^{\times} 3=$ Rs. 30,000 |

## CAPITALISATION METHODS

Under this method the goodwill can be calculated in two ways: (a) by capitalizing the average profits, or (b) by capitalising the super profits.
(a) Capitalisation of Average Profits: Under 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 to ascertain the capitalised value of average profits as follows:

Average Profits $\times 100 /$ Normal Rate of Return
(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 capitalised value of average profits, i.e. (ii) - (iii).

## Illustration : 9

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 business is $10 \%$. Ascertain the value of goodwill by capitalisation average profits method, given that the value of net assets of the business is Rs. 8,20,000.

## Solution

a) capitalizing the average profits

$$
\text { Capitalised Value of Average Profits }=\text { Rs. } \frac{1,00,000 \times 100}{10}=\text { Rs. } 10,00,000
$$

Goodwill $=$ Capitalised value - Net Assets

$$
\begin{aligned}
& =\text { Rs. } 10,00,000-\text { Rs. } 8,20,000 \\
& =\text { Rs. } 1,80,000
\end{aligned}
$$

(b) Capitalisation of Super Profits:

Goodwill $=$ Super Profits $\times 100$ Normal Rate of Return

The average profits are Rs. 1,00,000 and the normal profits are Rs. 82,000 ( $10 \%$ of Rs. $8,20,000$ ), the super profits worked out as Rs. 18,000 (Rs. $1,00,000$ - Rs. 82,000 ), the goodwill will be calculated as follows.

$$
\text { Rs. } 18,000 \times \frac{100}{10}=\text { Rs. } 1,80,000 .
$$

## Illustration : 10

Rajinder and Surinder are partners in a firm sharing profits in the ratio of 4:1. On April 15, 2017 they admit Narender as a new partner. On that date there was a balance of Rs. 20,000 in general reserve and a debit balance of Rs. 10,000 in the profit and loss account of the firm. Pass necessary journal entries regarding adjustment of a accumulate a profit or loss


## RETIREMENT OF A PARTNER

## Illustration : 11

Madhu, Neha and Tina are partners sharing profits in the ratio of 5:3:2. Calculate new profit sharing ratio and gaining ratio if

1. Madhu retires
2. Neha retires
3. Tina retires.

## Solution

Given old ratio among Madhu: Neha : Tina as $5: 3: 2$

1. If Madhu retires, new profit sharing Ratio between Neha and Tina will be Neha : Tina $=3: 2$ and Gaining Ratio of Neha and Tina $=3: 2$
2. If Neha retires new profit sharing Ratio between Madhu and Tina will be

Madhu : Tina $=5: 2$
Gaining Ratio of Madhu and Tina $=5: 2$
3. If Tina retires, new profit sharing ratio between Madhu and Neha will be:

Madhu : Neha = 5:3
Gaining ratio of Madhu and Neha $=5: 3$

## Illustration :12

Amit, Dinesh and Gagan are partners sharing profits in the ratio of 5:3:2.Dinesh retires. Amit and Gagan decide to share the profits of the new firm in the ratio of $3: 2$. The gaining ratio will be calculated as follows :

Amit's Gaining Share $\quad=\frac{3}{5}-\frac{5}{10}=\frac{6-5}{10}=\frac{1}{10}$
Gagan's Gaining Share $=\frac{2}{5}-\frac{2}{10}=\frac{4-2}{10}=\frac{2}{10}$
Thus, Gaining Ratio of Amit and Gagan = 1:2. This implies Amit gains $\frac{1}{3}$ and Gagan gains $\frac{2}{3}$ of Dinesh's share of profit.

## Illustration : 13

Ranjana, Sadhna and Kamana are partners sharing profits in the ratio 4:3:2. Ranjana retires; Sadhna and Kamana decided to share profits in future in the ratio of 5:3. Calculate the Gaining Ratio.

## Solution

Gaining Share $\quad=$ New Share - Old Share
Sadhna's Gaining Share $=\frac{5}{8}-\frac{3}{9}=\frac{45-24}{72}=\frac{21}{72}$
Kamana's Gaining Share $=\frac{3}{8}-\frac{2}{9}=\frac{27-16}{72}=\frac{11}{72}$
Gaining Ratio between Sadhna and Kamana $=$ 21:11.

## Illustration: 14

$\mathrm{A}, \mathrm{B}$. and C are partners in a firm sharing profits in the ratio of $3: 2: 1 \mathrm{~B}$ retires. The goodwill of the firm is valued at Rs. 60,000 and the remaining partners A and C continue to share profits in the ratio of $3: 1$. The journal entries passed under various alternatives shall be as follows:
(a) If goodwill is raised at full value and retained in books
Goodwill A/c
Dr. 60,000
To A's capital A/c
To B's capital A/c
To C's capital A/c
(Goodwill raised at full value and credited to all the partners in their old profit sharing ratio)
(b) If goodwill is raised at full value and written off immediately.
(i) Goodwill A/c
Dr.
60,000
To A's capital A/c 30,000
To B's capital A/c
20,000
To C's capital A/c
10,000
(Goodwill raised at full value and credited to all partners in old ratio)
(ii)A's capital A/c
Dr.
45,000
C's capital A/c
Dr.
15,000

To Goodwill A/c
60,000
(Goodwill written off and debited to remaining partners in the new ratio)
(c) If goodwill is raised to the extent of retiring partner's share and written off immediately.
(i) Goodwill A/c
Dr.
20,000
To B's capital A/c
20,000
(Goodwill raised to the extant of B's share)
(ii) A's capital A/c
Dr.
15,000
C's capital A/c
Dr.
5,000
To goodwill A/c
20,000
(Goodwill written off by debiting remaining partners' in gaining ratio)
(d) If goodwill is not to appear in firm's books at all
A's capital A/c
Dr.
15,000
C's capital A/c
Dr.
5,000

To C's capital A/c
(B's share of goodwill adjusted to remaining partners'
capital accounts in gaining ratio)

## Illustration :15

Hanny, Pammy and Sunny are partners sharing profits in the ratio of $3: 2: 1$. Goodwill is appearing in the books at a value of Rs. 60,000. Pammy retires and at the time of Pammy's retirement, goodwill is valued at Rs. 84,000 . Hanny and Sunny decided to share future profits in the ratio of $2: 1$. Record the necessary journal entries.
Solution
Books of Hanny and Sunny
Journal

| Date | Particulars | L.F. | Debit <br> (Rs.) | Credit <br> (Rs.) |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Hanny's Capital A/c | Dr. |  | 30,000 |  |
|  | Pammy's Capital A/c | Dr. |  | 20,000 |  |



Working Notes
(i) Pammy's share of current value of goodwill $\frac{1}{3}$ of Rs. 84,000

$$
=84,000 \times \frac{1}{3}=\text { Rs. } 28,000
$$

(ii) Gaining Share $=$ New Share - Old Share

$$
\begin{aligned}
& \text { Hanny's Gaining Share }=\frac{2}{3}-\frac{3}{6}=\frac{1}{6} \\
& \text { Sunny's Gaining Share }=\frac{1}{3}-\frac{1}{6}=\frac{1}{6}
\end{aligned}
$$

This gaining Ratio of Hanny and Sunny is $\frac{1}{6}: \frac{1}{6}=1: 1$

## DEATH OF A PARTNER

## Illustration:16

Anil, Bhanu and Chandu were partners in a firm sharing profits in the ratio of 5:3:2. On March 31, 2017, their Balance Sheet was as under: Books of Anil, Bhanu and Chandu Balance Sheet as on March 31, 2017

Books of Anil, Bhanu and Chandu
Balance Sheet as on March 31, 2017

| Liabilities | Amo <br> unt | Assets | Amo <br> unt |  |
| :--- | :--- | ---: | :--- | ---: |
| Creditors |  | 11, | Buildings | 20, |
|  |  | 000 |  | 000 |
| Reserve Fund |  | 6,0 | Machinery | 30, |
|  |  | 00 |  | 000 |
| Anil's Capital | 30,000 |  | Stock | 10, |
|  |  |  | 000 |  |
| Bhanu's Capital | 25,000 |  | Patents | 11, |
|  |  | 70, |  | 000 |
| Chandu's Capital | $\underline{15,000}$ | 000 | Debtors | 8,0 |
|  |  |  | 00 |  |
|  |  |  | Cash | 8,0 |
|  |  |  | 00 |  |
|  |  |  |  | 87,000 |

Anil died on October 1, 2017. It was agreed between his executors and the remaining partners that:
(a)Goodwill to be valued $21 / 2$ year's purchase of the average profits of the previous four years which were :

Year 2013-14 - Rs.13,000, Year 2014-15 - Rs. 12,000,
Year 2015-16 - Rs.20,000, Year 2016-17 - Rs.15,000
(b) Patents be valued at Rs.8,000; Machinery at Rs.28,000; and Building at Rs.25,000.
(c) Profit for the year 2017-18 be taken as having accrued at the same rate as that of the previous year.
(d) Interest on capital be provided at $10 \%$ p.a.
(e) Half of the amount due to Anil be paid immediately.

## Solution :

Dr. Books of Anil, Bhanu and Chander Anil's Capital Account Cr

| 2017 | Particulars | J.F. | Amount (Rs. ) | Date $2017$ | Particulars | J.F. | Amount (Rs.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct. 1 | Anil's Executors |  | 57,000 | April, 1 <br> Oct. 1 | Balance b/d <br> Reserve Fund Bhanu's Capital Chandu's Capital Profit \& Loss (Suspense) |  | $\begin{array}{r} 30,000 \\ 3,000 \\ 11,250 \\ 7,500 \\ 3,750 \\ 1,500 \end{array}$ |
|  |  |  | 57,000 |  | Interest on Capital |  | 57,000 |

Dr. Anil's Executor's Account Cr

| Date <br> 2017 | Particulars | J.F. | Amount <br> (R | Date <br> 2017 | Particulars | J.F. | Amount <br> (R |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Oct.1 | Bank |  | 28,500 | Oct.1 | Anil's Capital |  | 57,000 |
| Balance c/d |  | 28,500 |  |  |  |  |  |
|  |  |  | 57,000 |  |  |  | 57,000 |

## Working notes:

Notes: 1 Revaluation Account

| Date | Particulars | J.F. | Amount <br> (Rs.) | Date | Particulars | J.F. | Amount <br> (Rs.) |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- |
|  | Patents |  | 3,000 |  | Building |  | 5,000 |
|  | Machinery |  | 2,000 |  |  |  |  |
|  |  |  | 5,000 |  |  |  | 5,000 |

Notes: 2
Goodwill $=21 / 2$ years' purchase $\times$ Average Profit
Average Profit =

$$
\frac{\text { Rs. } 13,000+\text { Rs. } 12,000+\text { Rs. } 20,000+\text { Rs. } 15,000}{4}
$$

$$
=\frac{\text { Rs. } 60,000}{4}=\text { Rs. } 15,000
$$

Goodwill $=\frac{5}{2} \times$ Rs. $15,000=$ Rs. 37,500
Anil's Share of Goodwill $=\frac{5}{10} \times$ Rs. $37,500=$ Rs. 18,750
Notes: 3
Profit from the date of last balance sheet to date of death (April 1, 2017 to October 1, 2017) $=$ 6 months

$$
\begin{aligned}
& \text { Profit for } 6 \text { months }=\text { Rs. } 15,000 \times \frac{6}{12}=\text { Rs. } 7,500 \\
& \text { Anil's share of profit }=\text { Rs. } 7,500 \times \frac{5}{10}=\text { Rs. } 3,750
\end{aligned}
$$

Notes: 4
Interest on Capital (April 1, 2017 to October 1, 2017)

$$
=\text { Rs } 30,000 \times 10 / 100 \times 6 / 12=\text { Rs. } 1,500
$$

## Section A

1. Identify various matters that need adjustments at the time of admission of a new partner.
2. Why it is necessary to ascertain new profit sharing ratio even for old partners when a new partner is admitted?
3. What is goodwill? What factors affect goodwill?
4. Explain various methods of valuation of goodwill.
5. 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:

|  | Rs. |
| :---: | :---: |
| 2013 | 40,000 |
| 2014 | 50,000 |
| 2015 | 60,000 |
| 2016 | 50,000 |
| 2017 | 60,000 |

6. Capital employed in a business is Rs. $2,00,000$. The normal rate of return on capital employed is $15 \%$. During the year 2015 the firm earned a profit of Rs. 48,000 . Calculate goodwill on the basis of 3 years purchase of super profit?
7. The books of Ram and Bharat showed that the capital employed on 31.12.2016 was Rs. 5,00,000 and the profits for the last 5 years : 2015 Rs. 40,000; 2014 Rs. 50,000; 2013 Rs. 55,$000 ; 2012$ Rs. 70,000 and 2011 Rs. 85,000 . Calculate the value of goodwill on the
basis of 3 years purchase of the average super profits of the last 5 years assuming that the normal rate of return is $10 \%$ ?
8. Rajan and Rajani are partners in a firm. Their capitals were Rajan Rs. 3,00,000; Rajani Rs. 2,00,000. During the year 2015 the firm earned a profit of Rs. 1,50,000. Calculate the value of goodwill of the firm assuming that the normal rate of return is $20 \%$ ?
9. A business has earned average profits of Rs. 1,00,000 during the last few years. Find out the value of goodwill by capitalisation method, given that the assets of the business are Rs. $10,00,000$ and its external liabilities are Rs. $1,80,000$. The normal rate of return is $10 \%$ ?

## Section B

1. Puneet, Pankaj and Pammy are partners in a business sharing profits and losses in the ratio of 2:2:1 respectively. Their balance sheet as on March 31, 2017 was as follows:

Balance Sheet as on March 31, 2017

| Liabilities | Amount (Rs.) | Assets | Amount (Rs.) |
| :---: | :---: | :---: | :---: |
| Sundry Creditors | 1,00,000 | Cash at Bank | 20,000 |
| Capital |  | Stock | 30,000 |
| Accounts: |  |  |  |
| Puneet 60,000 |  | Sundry Debtors | 80,000 |
| Pankaj 1,00,000 |  | Investments | 70,000 |
| Pammy $\quad 40,000$ | 2,00,000 | Furniture | 35,000 |
| Reserve | 50,000 | Buildings | 1,15,000 |
|  | 3,50,000 |  | 3,50,000 |

Mr. Pammy died on September 30, 2017. The partnership deed provided the following:
(i) The deceased partner will be entitled to his share of profit up to the date of death calculated on the basis of previous year's profit.
(ii) He will be entitled to his share of goodwill of the firm calculated on the basis of 3 years' purchase of average of last 4 years' profit. The profits for the last four financial years are given below: for 2013-14; Rs. 80,000; for 2014-15, Rs. 50,000; for 201516, Rs. 40,000; for 2016-17, Rs. 30,000.

The drawings of the deceased partner up to the date of death amounted to Rs. 10,000. Interest on capital is to be allowed at $12 \%$ per annum. Surviving partners agreed that Rs. 15,400 should be paid to the executors immediately and the balance in four equal yearly instalments with interest at $12 \%$ p.a. on outstanding balance.

Show Mr. Pammy's Capital account, his Executor's account till the settlement of the amount due.
2. Following is the Balance Sheet of Prateek, Rockey and Kushal as on March 31, 2017.

Books of Prateek, Rockey and Kushal Balance Sheet as on March 31, 2017

| Liabilities |  | Amount (Rs.) | Assets | Amount (Rs.) |
| :---: | :---: | :---: | :---: | :---: |
| Sundry Creditors |  | 16,000 | Bills Receivable | 16,000 |
| General Reserve |  | 16,000 | Furniture | 22,600 |
| Capital Accounts: |  |  | Stock | 20,400 |
| Prateek | 30,000 |  | Sundry Debtors | 22,000 |
| Rockey | 20,000 |  | Cash at Bank | 18,000 |
| Kushal | 20,000 | 70,000 | Cash in Hand | 3,000 |
|  |  | 1,02,000 |  | 1,02,000 |

Rockey died on June 30, 2017. Under the terms of the partnership deed, the executors of a deceased partner were entitled to:
a) Amount standing to the credit of the Partner's Capital account.
b) Interest on capital at $5 \%$ per annum.
c) Share of goodwill on the basis of twice the average of the past three years' profit and
d) Share of profit from the closing date of the last financial year to the date of death on the basis of last year's profit.

Profits for the year ending on March 31, 2015, March 31, 2016 and March 31, 2017 were Rs. 12,000 , Rs. 16,000 and Rs. 14,000 respectively. Profits were shared in the ratio of capitals.

Pass the necessary journal entries and draw up Rockey's capital account to be rendered to his executor.
3. Narang, Suri and Bajaj are partners in a firm sharing profits and losses in proportion of $1 / 2,1 / 6$ and $1 / 3$ respectively. The Balance Sheet on April 1, 2015 was as follows:

## Books of Suri and Bajaj

Balance Sheet as on April 1, 2015

| Liabilities | Amount <br> (Rs.) | Assets | Amount <br> (Rs.) |
| :--- | :---: | :--- | :---: |
| Bills Payable | 12,000 | Freehold Premises | 40,000 |
| Sundry Creditors | 18,000 | Machinery | 30,000 |
| Reserves | 12,000 | Furniture | 12,000 |
| Capital Accounts: |  | Stock | 22,000 |


| Narang Suri <br> Bajaj | 30,000 |  | Sundry Debtors | 20,000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30,000 |  | Less: Reserve for Bad | 1,000 | 19,000 |
|  | 28,000 | 88,000 | Debt Cash |  | 7,000 |
|  |  | 1,30,000 |  |  | 1,30,000 |

Bajaj retires from the business and the partners agree to the following:
a) Freehold premises and stock are to be appreciated by $20 \%$ and $15 \%$ respectively.
b) Machinery and furniture are to be depreciated by $10 \%$ and $7 \%$ respectively.
c) Bad Debts reserve is to be increased to Rs. 1,500.
d) Goodwill is valued at Rs. 21,000 on Bajaj's retirement.
e) The continuing partners have decided to adjust their capitals in their new profit sharing ratio after retirement of Bajaj. Surplus/deficit, if any, in their capital accounts will be adjusted through current accounts.

Prepare necessary ledger accounts and draw the Balance Sheet of the reconstituted firm.
4. The Balance Sheet of Rajesh, Pramod and Nishant who were sharing profits in proportion to their capitals stood as on March 31, 2015:

Books of Rajesh, Pramod and Nishant Balance Sheet as on March 31, 2015

| Liabilities | Amount (Rs.) | Assets |  | Amount (Rs.) |
| :---: | :---: | :---: | :---: | :---: |
| Bills Payable | 6,250 | Factory Building |  | 12,000 |
| Sundry Creditors | 10,000 | Debtors | 10,500 |  |
| Reserve Fund | 2,750 | Less: Reserve | 500 | 10,000 |
| Capital |  | Bills Receivable |  | 7,000 |
| Accounts: |  |  |  |  |
| Rajesh 20,000 |  | Stock |  | 15,500 |
| Pramod 15,000 |  | Plant and |  | 11,500 |
|  |  | Machinery |  |  |
| Nishant $\quad 15,000$ | 50,000 | Bank Balance |  | 13,000 |
|  | 69,000 |  |  | 69,000 |
|  |  |  |  |  |

Pramod retired on the date of Balance Sheet and the following adjustments were made:
a) Stock was valued at $10 \%$ less than the book value.
b) Factory buildings were appreciated by $12 \%$.
c) Reserve for doubtful debts be created up to $5 \%$.
d) Reserve for legal charges to be made at Rs. 265.
e) The goodwill of the firm be fixed at Rs. 10,000.
f) The capital of the new firm be fixed at Rs. 30,000. The continuing partners decide to keep their capitals in the new profit sharing ratio of $3: 2$.
Pass journal entries and prepare the balance sheet of the reconstituted firm after transferring the balance in Pramod's Capital account to his loan account.

## Section C

1. Following is the Balance Sheet of Jain, Gupta and Malik as on March 31, 2016.

Books of Jain, Gupta and Malik
Balance Sheet as on March 31, 2016

| Liabilities | Amount (Rs.) | Assets | Amount (Rs.) |
| :---: | :---: | :---: | :---: |
| Sundry Creditors | 19,800 | Land and Building | 26,000 |
| Telephone bills | 300 | Bonds | 14,370 |
| Outstanding |  |  |  |
| Accounts Payable | 8,950 | Cash | 5,500 |
| Accumulated profits | 16,750 | Bills Receivable | 23,450 |
| Capitals : |  | Sundry Debtors | 26,700 |
|  |  | Stock | 18,100 |
| Jain 40,000 |  | Office Furniture | 18,250 |
| Gupta 60,000 |  | Plants and Machinery | 20,230 |
| Malik 20,000 | 1,20,000 | Computers | 13,200 |
|  | 1,65,800 |  | 1,65,800 |

The partners have been sharing profits in the ratio of 5:3:2. Malik decides to retire from business on April 1, 2016 and his share in the business is to be calculated as per the following terms of revaluation of assets and liabilities : Stock, Rs.20,000; Office furniture, Rs.14,250; Plant and Machinery Rs.23,530; Land and Building Rs.20,000.

A provision of Rs.1,700 to be created for doubtful debts. The goodwill of the firm is valued at Rs.9,000.

The continuing partners agreed to pay Rs.16,500 as cash on retirement of Malik, to be contributed by continuing partners in the ratio of 3:2. The balance in the capital account of Malik will be treated as loan.

Prepare Revaluation account, capital accounts, and Balance Sheet of the reconstituted firm.
2. Arti, Bharti and Seema are partners sharing profits in the proportion of $3: 2: 1$ and their Balance Sheet as on March 31, 2016 stood as follows :

Books of Arti, Bharti and Seema
Balance Sheet as on March 31, 2016

| Liabilities | Amount <br> $($ Rs. $)$ | Assets | Amount <br> (Rs.) |
| :--- | ---: | :--- | ---: |
| Bills Payable | 12,000 | Buildings | 21,000 |
| Creditors |  | 14,000 | Cash in Hand |
| General Reserve |  | 12,000 | Bank | | 12,000 |
| :--- |
| Capitals: |
| Arti |

Bharti died on June 12, 2016 and according to the deed of the said partnership, her executors are entitled to be paid as under :
a. The capital to her credit at the time of her death and interest thereon @ $10 \%$ per annum.
b. Her proportionate share of reserve fund.
c. Her share of profits for the intervening period will be based on the sales during that period, which were calculated as Rs. $1,00,000$. The rate of profit during past three years had been $10 \%$ on sales.
d. Goodwill according to her share of profit to be calculated by taking twice the amount of the average profit of the last three years less $20 \%$. The profits of the previous years were :

$$
\begin{array}{ll}
2013 & \text { - Rs. } 8,200 \\
2014 & \text { - Rs } 9,000 \\
2015 & - \text { Rs. } 9,800
\end{array}
$$

The investments were sold for Rs. 16,200 and her executors were paid out. Pass the necessary journal entries and write the account of the executors of Bharti.
3. Nithya, Sathya and Mithya were partners sharing profits and losses in the ratio of 5:3:2. Their Balance Sheet as on March 31, 2015 was as follows :

Books of Nithya, Sathya and Mithya Balance Sheet at March 31, 2015

| Liabilities | Amount <br> $($ Rs. $)$ | Assets | Amount <br> (Rs.) |
| :--- | ---: | :--- | ---: |
| Creditors | 14,000 | Investments | 10,000 |
| Reserve Fund |  | 6,000 | Goodwill |
| Capitals: |  | Premises | 5,000 |
| Nithya | 30,000 |  | Patents |
| Sathya | 30,000 |  | Machinery |
| Mithya | 20,000 | 80,000 | Stock |

Mithya dies on August 1, 2015. The agreement between the executors of Mithya and the partners stated that :
a. Goodwill of the firm be valued at $2 \frac{1}{2}$ times the average profits of last four years. The profits of four years were : in 2011-12, Rs.13,000; in 2012-13, Rs.12,000; in 2013-14, Rs.16,000; and in 2014-15, Rs. 15,000.
b. The patents are to be valued at Rs.8,000, Machinery at Rs. 25,000 and Premises at Rs.25,000.
c. The share of profit of Mithya should be calculated on the basis of the profit of 201415.
d. Rs.4,200 should be paid immediately and the balance should be paid in 4 equal halfyearly instalments carrying interest @ $10 \%$.

Record the necessary journal entries to give effect to the above and write the executor's account till the amount is fully paid. Also prepare the Balance Sheet of Nithya and Sathya as it would appear on August 1, 2015 after giving effect to the adjustments.

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# SATHYABAMA <br> INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY) <br> Accredited "A" Grade by NAAC I 12B Status by UGC I Approved by AICTE 

SCHOOL OF MANAGEMENT STUDIES

## UNIT V DISSOLUTION OF PARTNERSHIP

## DISSOLUTION OF PARTNERSHIP

It means changes the existing relationship between partners but the firm may continue its business as before. The dissolution of partnership may take place in any of the following ways:
(1) Change in existing profit sharing ratio among partners;
(2) Admission of a new partner;
(3) Retirement of a partner;
(4) Death of a partner;
(5) Insolvency of a partner;
(6) Completion of the venture, if partnership is formed for that; and
(7) Expiry of the period of partnership, if partnership is for a specific period of time

## DISSOLUTION OF A FIRM

Dissolution of a partnership firm may take place without the intervention of court or by the order of a court, in any of the ways specified later in this section. It may be noted that dissolution of the firm necessarily brings in dissolution of the partnership.

Dissolution of a firm takes place in any of the following ways:

1. Dissolution by Agreement: A firm is dissolved :
(a) with the consent of all the partners or
(b) in accordance with a contract between the partners.
2. Compulsory Dissolution: A firm is dissolved compulsorily in the following cases:
(a) when all the partners or all but one partner, become insolvent, rendering them incompetent to sign a contract;
(b) when the business of the firm becomes illegal; or
(c) when some event has taken place which makes it unlawful for the partners to carry on the business of the firm in partnership, e.g., when a partner who is a citizen of a country becomes an alien enemy because of the declaration of war with his country and India.
3. On the happening of certain contingencies: Subject to contract between the partners, a firm is dissolved :
(a) if constituted for a fixed term, by the expiry of that term;
(b) if constituted to carry out one or more ventures, by the completion thereof; (c) by the death of a partner;
(d) by the adjudication of a partner as an insolvent.
4. Dissolution by Notice: In case of partnership at will, the firm may be dissolved if any one of the partners gives a notice in writing to the other partners, signifying his intention of seeking dissolution of the firm.
5. Dissolution by Court: At the suit of a partner, the court may order a partnership firm to be dissolved on any of the following grounds:
(a) when a partner becomes insane;
(b) when a partner becomes permanently incapable of performing his duties as a partner;
(c) when a partner is guilty of misconduct which is likely to adversely affect the business of the firm;
(d) when a partner persistently commits breach of partnership agreement;
(e) when a partner has transferred the whole of his interest in the firm to a third party;
(f) when the business of the firm cannot be carried on except at a loss; or
(g) when, on any ground, the court regards dissolution to be just and equitable.

## Distinction between Dissolution of Partnership and Dissolution of Firm

| Basis | Dissolution of Partnership | Dissolution of Firm |
| :---: | :---: | :---: |
| 1. Termination of business | The business is not terminated. | The business of the firm is closed. |
| 2. Settlement of | Assets and liabilities are | Assets are sold and |
| liabilities | sheet is drawn. |  |
| 3. Court's intervention | Court does not intervene because partnership is dissolved by mutual agreement. | A firm can be dissolved by the court's order. |
| 4. Economic relationship | Economic relationship between the partners continues though in a changed form. | Economic relationship between the partners comes to an end. |
| 5. Closure of books | Does not require because the business is not terminated. | The books of account are closed. |
| 6. Other dissolution | It may or may not involve dissolution of the firm. | It necessarily involves dissolution of partnership. |

## SETTLEMENT OF ACCOUNTS

In case of dissolution of a firm, the firm ceases to conduct business and has to settle its accounts. For this purpose, it disposes off all its assets for satisfying all the claims against it. In this context it should be noted that, subject to agreement among the partners, the following rules as provided in Section 48 of the Partnership Act 1932 shall apply.

## a) Treatment of Losses

Losses, including deficiencies of capital, shall be paid :
(i) first out of profits,
(ii) next out of capital of partners, and
lastly, if necessary, by the partners individually in their profits sharing ratio.

## b) Application of Assets

The assets of the firm, including any sum contributed by the partners to make up deficiencies of capital, shall be applied in the following manner and order:
(i) In paying the debts of the firm to the third parties;
(ii) In paying each partner proportionately what is due to him/her from the firm for advances as distinguished from capital (i.e. partner' loan);
(iii) In paying to each partner proportionately what is due to him on account of capital; and
(iv) the residue, if any, shall be divided among the partners in their profit sharing ratio.

Thus, the amount realised from assets along with contribution from partners, if required, shall be utilised first to pay off the outside liabilities of the firm such as creditors, loans, bank overdraft, bill payables, etc. (it may be noted that secured loans have precedence over the unsecured loans); the balance should be applied to repay loans and advances made by the partners to the firm. (in case the balance amount is not adequate enough to pay off such loans and advances, they are to be paid propartionately); and surplus, if any is to be utilised in settlement of the capital account balances, after adjusting all profits and losses.

Private Debts and Firm's Debts: Where both the debts of the firm and private debts of a partner co-exist, the following rules, as stated in Section 49 of the Act, shall apply.
(a) The property of the firm shall be applied first in the payment of debts of the firm and then the surplus, if any, shall be divided among the partners as per their claims, which can be utilised for payment of their private liabilities.
(b) The private property of any partner shall be applied first in payment of his private debts and the surplus, if any, may be utilised for payment of the firm's debts, in case the firm's liabilities exceed the firm's assets.

It may be noted that the private property of the partner does not include the personal properties of his wife and children. Thus, if the assets of the firm are not adequate enough to pay off firm's liabilities, the partners have to contribute out of their net private assets (private assets minus private liabilities).

## ACCOUNTING TREATMENT

When the firm is dissolved, its books of account are to be closed and the profit or loss arising on realisation of its assets and discharge of liabilities is to be computed. For this purpose, a Realisation Account is prepared to ascertain the net effect (profit or loss) of realisation of assets and payment of liabilities which may be is transferred to partner's capital accounts in their profit sharing ratio. Hence, all assets (other than cash in hand bank balance and fictitious assets, if any), and all external liabilities are transferred to this account. It also records the sale of assets, and payment of liabilities and realisation expenses. The balance in this account is termed as profit or loss on realisation which is transferred to partners' capital accounts in thier profit sharing ratio

| Particulars | Amount <br> (Rs.) | Particulars | Amount <br> (Rs.) |
| :--- | :---: | :--- | :---: |
| Land and Building <br> Plant and Machinery <br> Furniture and Fittings <br> Bills receivables <br> Sundry debtors <br> Cash/Bank (payment of <br> liabilities) <br> Cash/Bank (payment of <br> unrecorded liabilities) <br> Partner's capital account <br> (liability assumed by the <br> partner) <br> Profit (transferred to <br> partners' capital account's in <br> their profit sharing ratio) | xxx | xxx | xundry creditors <br> Bills payables <br> Bank overdraft <br> Outstanding expenses <br> Provision for doubtful debts <br> Total |

## Illustration:

Supriya and Monika are partners, who share profit in the ratio of 3:2. Following is the balance sheet as on March 31, 2017.

Balance Sheet of Supriya and Monika as on March 31, 2017

| Liabilities | Amount | Assets | Amount |
| :--- | ---: | :--- | ---: |
| Supriya's Capital | 32,500 | Cash and Bank | 40,500 |
| Monika's Capital | 11,500 | Stock | 7,500 |
| Sundry Creditors | 48,000 | Sundry debtors 21,500 |  |
| Reserve fund | 13,500 | Less: Provision_500 |  |
|  |  | for doubtful debts Fixed | 21,000 |
|  | Assets | 36,500 |  |
|  | $1,05,500$ |  | $1,05,500$ |

The firm was dissolved on March 31, 2017. Close the books of the firm with the following information:
(i) Debtors realised at a discount of 5\%,
(ii) Stock realised at Rs.7,000,
(iii) Fixed assets realised at Rs.42,000, (iv) Realisation expenses of Rs.1,500, (v) Creditors are paid in full.

Prepare necessary ledger accounts.
Solution
$\left.\begin{array}{|l|r|l|r|}\hline \text { Particulars } & \begin{array}{r}\text { Amount } \\ \left(\begin{array}{l}\text { ( }\end{array}\right. \\ \\ \text { Rs.) }\end{array} & \text { Particulars } & \begin{array}{r}\text { Amount } \\ \text { (Rs.) }\end{array} \\ \hline \text { Assets transferred: } & 7,5 & \text { Provision for doubtful debts } & 500 \\ \text { Stock } & 00 & \text { Sundry creditors } & 48,00 \\ \text { Sundry debtors } & 21,50 & \text { Bank } & 0 \\ \text { Fixed assets } & 0 & & \\ \text { Bank } & 36,50 & & \text { Debtors 20,425 }\end{array}\right]$

| Dr. |  |  | Partners Capital Accounts |  |  |  |  | Cr. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | $\begin{aligned} & \hline \text { J. } \\ & \text { F. } \end{aligned}$ | Supriya (Rs.) | Monika <br> (Rs.) | Date | Particulars | J.F | Supriya <br> (Rs.) | Monika <br> (Rs.) |
|  | Bank |  | 42,355 | 18,070 |  | Balance b/d <br> Reserve fund <br> Realisation (Profit) |  | $\begin{array}{r} \hline 32,500 \\ 8,100 \\ 1,755 \\ \hline \end{array}$ | $\begin{array}{r} 11,500 \\ 5,400 \\ 1,170 \\ \hline \end{array}$ |
|  |  |  | 42,355 | 18,070 |  |  |  | 42,355 | 18,070 |


| Dr. | Cash and Bank Account |  |  |  |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | J.F. | Amou nt Rs.) | Date | Particulars | J.F. | Amount <br> (Rs.) |
|  | Balance b/d Realisation |  | $\begin{aligned} & \hline 40,500 \\ & 69,425 \end{aligned}$ |  | Realisation <br> Realisation <br> Supriya's Capital <br> Monika's Capital |  | $\begin{array}{r} \hline 48,000 \\ 1,500 \\ 42,355 \\ 18,070 \end{array}$ |
|  |  |  | 1,09,925 |  |  |  | 1,09,925 |

## JOURNAL ENTRIES

1. For transfer of assets

All asset accounts excluding cash, bank and the fictitious assets, if any are closed by transfer to the debit of Realisation Account at their book values. It may be noted that sundry debtors are transferred at gross value and the provision for doubtful debts is transferred to the credit side of Realisation Account along with liabilities. The same thing will apply to fixed assets, if provision for depreciation account is maintained.

> Realisation A/c

Dr.
To Assets (Individually) A/c
2. For transfer of liabilities

All external liability accounts including provisions, if any, are closed by transferring them to the credit of Realisation account.
Liabilities Dr.
(individually) To
Realisation A/c
3. For sale of assets
Bank A/c Dr.
To Realisation A/c
4. For an asset taken over by a partner

## Partner's Capital A/c

Dr.
To Realisation A/c
5. For payment of liabilities

Realisation A/c
Dr.

## To Bank A/c

6. For a liability which a partner takes responsibility to discharge
Ralisation A/c
Dr.
To Partner's Capital A/c
7. For settlement with the creditor through transfer of assets when a creditor accepts an asset in full and final settlement of his account, journal entry needs to be recorded. But, if the creditor accepts an asset only as part payment of his/her dues, the entry will be made for cash payment only. For example, a creditor to whom Rs. 10,000 was due accepts office equipment worth Rs. 8,000 and is paid Rs. 2,000 in cash, the following entry shall be made for the payment of Rs. 2,000 only.
Realisation A/c
Dr.
To Bank A/c

However, when a creditor accepts an asset whose value is more than the amount due to him, he/she will pay cash to the frim for the difference for which the entry will be:
Bank A/c
Dr.

To Realisation A/c
8. For payment of realisation expenses
(a) When some expenses are incurred and paid by the firm in the process of realisation of assets and payment of liabilities:
Realisation A/c
Dr.
To Bank A/c
(b) When realisation expenses are paid by a partner on behalf of the firm:
Realisation A/c
Dr.
To Partner's Capital A/c
(c) When a partner has agreed to undertake the dissolution work for an agreed remuneration bear the realisation expenses:
(i) if payment of realisation expenses is made by the firm
Partner's Capital A/c
Dr.
To Bank A/c
(ii) if the partner himself pays the realisation expenses, no entry is required
(iii) For agreed remuneration to such partner

Realisation A/c Dr.
To Partner's Capital A/c
9. For realisation of any unrecorded assets including goodwill, if any

## Bank A/c

Dr.
To Realisation A/c
10.For settlement of any unrecorded liability

Realisation A/c
Dr.
To Bank A/c
11.For transfer of profit and loss on realisation
(a) In case of profit on realisation

$$
\begin{array}{ll}
\text { Realisation A/c } & \text { Dr. } \\
\text { To Partners' Capital A/c (individually) A/c }
\end{array}
$$

(b) In case of loss on realisation

Partners' Capital A/c (individually) Dr.
To Realisation A/c
12.For transfer of accumulated profits in the form of reserve fund or general reserve:

Reserve Fund/General Reserve A/c Dr.
To Partners' Capital A/c (individually)
13.For transfer of fictitious assets, if any, to partners' capital accounts in their profit sharing ratio:

Partners' Capital A/c (individually) Dr.
To Fictitious Asset A/c
14.For payment of loans due to partners
Partner's Loan A/c
Dr.
To Bank A/c
15.For settlement of partners' accounts

If the partner's capital account shows a debit balance, he brings in the necessary cash for which the entry will be:
Bank A/c
Dr.
To Partner's Capital A/c

The balance is paid to partners whose capital accounts show a credit balance and the following entry is recorded.

Partners' Capitals A/cs (individually) Dr.
To Bank A/c
It may be noted that the aggregate amount finally payable to the partners must equal to the amount available in bank and cash accounts. Thus, all accounts of a firm are closed in case of dissolution.

## Illustration :1

Nayana and Arushi were partners sharing profits equally Their Balance Sheet as on March 31, 2017 was as follows:

Balance Sheet of Nayana and Arushi as on March 31, 2017

| Liabilities | nt Rs.) ( | Assets |  |
| :---: | :---: | :---: | :---: |
| Capitals: |  | Bank | $\begin{gathered} 30, \\ 000 \end{gathered}$ |
| Nayana 100000 |  | Debtors | $\begin{gathered} 25, \\ 000 \end{gathered}$ |
| Arushi 50000 | $1,50,0$ 00 | Stock | $\begin{gathered} 35 \\ 000 \end{gathered}$ |
| Creditors | $\begin{gathered} 20, \\ 000 \end{gathered}$ | Furniture | $\begin{gathered} 40 \\ 000 \end{gathered}$ |
| Arushi's current account | $\begin{array}{r} 10 \\ 000 \end{array}$ | Machinery | $\begin{array}{r} 60, \\ 000 \end{array}$ |
| Workmen Compensation Fund | $\begin{array}{r} 15 \\ 000 \end{array}$ | Nayana's current account | $\begin{gathered} 10 \\ 000 \end{gathered}$ |
| Bank overdraft | 5,0 00 |  |  |
|  | 2,00,000 |  | 2,00,000 |

The firm was dissolved on the above date:

1. Nayana took over $50 \%$ of the stock at $10 \%$ less on its book value, and the remaining stock was sold at a gain of $15 \%$. Furniture and Machinery realised for Rs. 30,000 and Rs.50,000 respectively;
2. There was an unrecorded investment which was sold for Rs. 25,000;
3. Debtors realised $90 \%$ only and Rs. 1,200 were recovered for bad debts written-off last year;
4. There was an outstanding bill for repairs which had to be paid for Rs.2,000.

Record necessary journal entries and prepare ledger accounts to close the books of the firm.

Books of Nayana and Arushi Journal

| Particular | Debit | Credit |
| :---: | :---: | :---: |
| Realisation A/c Dr | 1,60,000 |  |
| To Debtors A/c |  | 25,000 |
| To Stock A/c |  | 35,000 |
| To Furniture A/c |  | 40,000 |
| To Machinery A/c |  | 60,000 |
| (Assets transferred to Realisation Account) |  |  |
| Creditors A/c Dr | 20,000 |  |
| Bank overdraft A/c | 5,000 |  |
| To Realisation A/c |  | 25,000 |
| Realisation A/c Dr | 27,000 |  |
| To Bank A/c |  | 27,000 |
| Creditors, Bank overdraft, Outstanding repair bill paid) |  |  |
| Bank A/c Dr | 1,57,825 |  |
| To Realisation A/c |  | 1,57,825 |
| (Assets sold and bad debts recovered) |  |  |
| Nayana's Capital A/c Dr | 15,750 |  |
| To Realisation A/c |  | 15,750 |
| (Half stock take over by Nayana at 10\% less) |  |  |
| Realisation A/c Dr | 15,575 |  |
| To Nayana's Current A/c |  | 5,788 |
| To Arushi's Current A/c |  | 5,787 |
| (Realisation profit transferred to partner's current account) |  |  |
| Workman Compensation Fund A/c Dr | 15,000 |  |
| To Nayana's Current A/c |  | 7,500 |
| To Arushi's Current A/c |  | 7,500 |
| (Compensation fund transfered to partners' Current account) |  |  |
| Arushi Current A/c Dr | 23,287 |  |
| To Arushi's Capital A/c |  | 23,287 |
| Current account balance transferred to Capital account) |  |  |
| Nayana Capital A/c Dr. | 12,462 |  |
| To Nayana's Current A/c |  | 12,462 |
| (Current account balance transferred to Capital account) |  |  |
| Nayana's Capital A/c Dr | 87,538 |  |
| Arushi's Capital A/c Dr | 73,287 |  |
| To Bank A/c |  | 1,60,825 |
| (Final amounts due to partners paid) |  |  |

Realisation Account


Dr.
$\left.\begin{array}{|l|l|l|r|r|r|l|r|r|r|}\hline \text { Date } & \text { Particulars } & \begin{array}{l}\text { J. } \\ \text { F. }\end{array} & \text { Nayana } & \text { Arushi } & \text { Date } & \text { Particulars } & \begin{array}{l}\text { J. } \\ \text { F. }\end{array} & \text { Nayana } & \text { Arushi } \\ \hline & \begin{array}{l}\text { Balance b/d } \\ \text { Realisation }\end{array} & & 10,000 & 15,750 & & & \begin{array}{l}\text { Balance b/d } \\ \text { Workmen } \\ \text { Arushi's } \\ \text { capital }\end{array} & & 23,287\end{array}\right)$

Dr. Partner's Current Accounts Cr

| Date | Particulars | J.F. | Nayana | Arushi | Date | Particulars | J.F. | Nayana | Arushi |
| :--- | :--- | ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- |
|  | Nayana's <br> current <br> account |  | 12,462 |  |  | Balance b/d |  | $1,00,000$ | 50,000 |
| Bank | 87,538 | 73,287 |  | Arushi’s <br> current <br> account |  |  | 23,287 |  |  |
|  |  |  | $1,00,000$ | 73,287 |  |  |  | $1,00,000$ | 73,287 |

Dr. Partner's Current Accounts Cr

| Date | Particulars | J.F. | Amou | Date | Particulars | J.F. | Amount |
| :--- | :--- | :--- | ---: | ---: | :--- | :--- | ---: |
|  | Balance b/d |  | 30,000 |  | Realisation |  | 27,000 |
|  | Realisation |  | $1,57,825$ |  | Nayana's capital |  | 87,538 |
|  |  |  |  | Arushi's capital |  | 73,287 |  |
|  |  |  | $1,87,825$ |  |  |  | $1,87,825$ |

## Illustration : 2

Following is the Balance Sheet of Ashwani and Bharat on March 31, 2017.
Balance Sheet Ashwani and Bharat as on March 31, 2017

| Liabilities |  | Amount | Assets |  | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Creditors |  | $\begin{gathered} 76, \\ 000 \end{gathered}$ | Cash at bank |  | 17, 000 |
| Mrs.Ashwani’s loan |  | 10, 000 | Stock |  | 10, 000 |
| Mrs.Bharat loan |  | $\begin{array}{r} 20, \\ 000 \end{array}$ | Investments |  | 20, 000 |
| Investment fluctuation fund |  | 2,0 00 | Debtors | 40,000 |  |
| Reserve fund |  | $\begin{array}{r} 20, \\ 000 \end{array}$ | Less: Provision for doubtful debts | 4,000 | 36, 000 |
| Capitals: |  |  | Buildings |  | 70 000 |
| Ashwani | 20,000 |  | Goodwill |  | 15, 000 |
| Bharat | $\underline{20,000}$ | $\begin{array}{r} 40, \\ 000 \\ \hline \end{array}$ |  |  |  |
|  | - | 1,68,000 |  |  | 1,68,000 |

The firm was dissolved on that date. The following was agreed transactions took place.

- Aswhani promised to pay Mrs. Ashwani's loan and took away stock for Rs.8,000.
- Bharat took away half of the investment at $10 \%$ less. Debtors realised for Rs.38,000. Creditor's were paid at less of Rs.380. Buildings realised for Rs.1,30,000, Goodwill Rs.12,000 and the remaining Investment were sold at Rs.9,000. An old typewriter not recorded in the books was taken over by Bharat for Rs. 600. Realisation expenses amounted to Rs. 2,000.

Prepare Realisation Account, Partner's Capital Account and Bank Account

Solution

| Particulars |  | Amount | Particulars |  | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Investment | 20,000 |  | Provision for doubtful debts |  | 4,0 00 |
| Debtors | 40,000 |  | Creditors |  | 76 000 |
| Buildings | 70,000 |  | Mrs. Ashwani loan |  | 10 000 |
| Stock | 10,000 |  | Mrs. Bharat loan |  | 20, 000 |
| Goodwill | $\underline{15,000}$ | $\begin{array}{r} 1,55,0 \\ 00 \end{array}$ | Investment fluctuation fund |  | 2,0 00 |
| Ashwani's Capital |  | 10, | Ashwani's |  | 8,0 |
| (Mrs.Ashwani's loan\} |  | 000 | Capital[stock] |  | 00 |
| Bank (Mrs. Bharat's loan) |  | $\begin{gathered} 20 \\ 000 \end{gathered}$ | Bharat's capital (Typewriter) |  | 600 |
| Bank (creditors) |  | $\begin{gathered} 75, \\ 620 \end{gathered}$ | Bharat's capital (Investment) |  | 9,0 00 |
| Bank (realisation expenses) |  | 2,0 00 | Bank: |  |  |
| Profit transferred to: |  |  | Investment | 9,000 |  |
| Ashwani's Capital 27,990 |  |  | Debtors | $\begin{array}{r} 38,00 \\ 0 \end{array}$ |  |
| Bharat's Capital 27,990 |  | $\begin{array}{r} 55, \\ 980 \\ \hline \end{array}$ | Buildings | 1,30,000 |  |
|  |  |  | Goodwill | 12,000 | 1,89,000 |
|  |  | 3,18,600 |  |  | 3,18,600 |

Partner's Capital Accounts
$\left.\begin{array}{|l|l|r|r|r|r|l|r|r|r|}\hline \text { Date } & \text { Particulars } & \text { J.F. } & \text { Ashwani } & \text { Bharat } & \text { Date } & \text { Particulars } & \text { J.F. } & \text { Ashwani } & \text { Bharat } \\ \hline & \begin{array}{l}\text { Realisation(stock) } \\ \text { Realisation [sale } \\ \text { of typewriter] }\end{array} & & 8,000 & - & & \begin{array}{l}\text { Balance b/d } \\ \text { Reserve } \\ \text { fund }\end{array} & & 20,000 & 20,000 \\ \begin{array}{l}\text { Realisation } \\ \text { [investment] }\end{array} & & 600 & & 10,000 & 10,000 \\ \text { Realisation }\end{array}\right)$

Bank Account

| Date | Particulars | J.F. | Amount | Date | Particulars | J.F. | Amount |
| :--- | :--- | ---: | ---: | ---: | :--- | ---: | ---: |
|  | Balance b/d |  | 17,000 |  | Realisation [creditors] |  | 75,620 |
|  | Realisation |  | $1,89,000$ |  | Realisation [expenses] |  | 2,000 |
|  |  |  |  |  | Realisation (Mrs.Bharat's loan) |  | 20,000 |
|  |  |  |  |  | Ashwani's capital |  | 59,990 |
|  |  |  |  |  | Bharat's capital |  | 48,390 |
|  |  |  | $2,06,000$ |  |  |  | $2,06,000$ |

## Illustration : 3

The following is the Balance sheet of A, B and C on December 31, 2007:

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Creditors | 20,000 | Cash | 6,000 |
| Reserve Fund | 15,000 | Stock | 20,000 |
| A's Capital | 25,000 | Plants \& Tools | 20,000 |
| B's Capital | 15,000 | Sundry Debtors | 10,000 |
|  |  | Bills Receivable | 10,000 |
|  |  | C's Capital Overdrawn | 9,000 |
|  |  |  | 75,000 |
|  |  |  |  |
|  |  |  |  |

C is insolvent but his estate pays ₹ 2,000 . It is decided to wind up the partnership. The assets realized as follows:

- Sundry Debtors 7,500
- Bills Receivable 7,000
- Stock 16,000
- Plant \& Tools 14,000
- The cost of winding up came to 2,500

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

## Solution

## Dissolution A/c

| Particulars | $₹$ | Particulars | $₹$ |
| :--- | ---: | :--- | ---: |
| To Stock | 20,000 | By Sundry Debtors | 7,500 |
| To Plant \& Tools | 20,000 | By Bills Receivable | 7,000 |
| To Sundry Debtors | 10,000 | By Stock | 16,000 |
| To Bills Receivables | 10,000 | By Plant \& Tools | 14,000 |
| To Cash (cost of winding up) | 2,500 | By Loss on Dissolution |  |
|  |  | A | 6,000 |
|  |  | B | 6,000 |
|  | C | 6,000 | 18,000 |
|  | 62,500 |  |  |

Partner's Current A/c

| Particulars | A <br> (Rs) | B <br> (Rs) | C <br> (Rs) | Particulars | A <br> (Rs) | B <br> (Rs) | C <br> (Rs) |
| :--- | :---: | :---: | ---: | :--- | ---: | ---: | ---: |
| To Loss on Dissolution | 6,000 | 6,000 | 6,000 | By Reserve Fund | 5,000 | 5,000 | 5,000 |
| To C's Capital A/c | - | - | 9,000 | By Cash A/c | - | - | 2,000 |
| To C's Current A/c(1) | 5,000 | 3,000 | - | By A's Current A/c | - | - | 5,000 |
|  |  |  |  |  | By B's Current A/c | - | - |

Cash A/c

| Particulars | $₹$ | Particulars |  |
| :--- | ---: | :--- | ---: |
| To Balance b/d | 6,000 | By Expenses of winding up | 2,500 |
| To C's Current A/c | 2,000 | By Creditors A/c | 20,000 |
| To A's Current A/c | 6,000 | By A's Capital A/c | 25,000 |
| To B's Current A/c | 4,000 | By B's Capital A/c | 15,000 |
| To Realization A/c |  |  |  |
| (Dissolution A/c) | 7,500 |  |  |
| Sundry Debtors A/c | 7,000 |  |  |
| Bills Receivable A/c | 16,000 |  |  |
| Stock A/c | 14,000 |  | 62,500 |

## Garner vs. Murray Decision:

In England, Garner, Murray and Wilkins were three equal partners with unequal capital in a business. On June 30, 1990, they decided to dissolve their partnership firm. At the time of dissolution, the capital account of Wilkins showed a debit balance of some amount and nothing dissolution, the capital account of Wilkins showed a debit balance of some amount and nothing could be recovered from his due to insolvent. Garner wanted to share this loss in profit sharing ratio but Murray said loss on account Wilkins's insolvency was to business loss but a capital loss. Thus it should be divided in the capital ratio. A suit was filed:
The case was decided by lord justice Joyee. According to this decision:

- The solvent partners should bring in cash equal to their share of the loss on realization.
- Deficiency of the insolvent partner should be shared vb, solvent partners in the ratio of their adjusted capital just before dissolution.
- If a partner has a debit balance of his/her capital account on the relevant date, her/she will not bear loss an account of insolvent partner even thought he/she may be financially more sound as company to other solvent partners.
According to Garner vs. Murray decision, the following point should be considered in case of an insolvency of a partner while dissolving the partnership firm:
- First of all, realization account is prepared and its profit or loss is transferred to all partner's capital account including insolvent partner in their profit sharing ratio.
- Solvent partners of the firm should bring the loss on realization in cash. In this situation, bank account is debited and solvent partners' capital accounts are credited.
- The ratio of last adjusted of the solvent partners should be calculated.
- Undistributed profit or loss and reserve should be distributed among all partners in their profit-sharing ratio.
- If any amount is received from the insolvent partner from his/her private estate, it should be credited to his/her capital account.
- After making all adjustment, the recorded debit balance of the insolvent partner should be transferred to the capital accounts of solvent partner in the ratio of last adjusted capital.
- The solvent partners, who have credit balance in their capital accounts, should draw out or bank balance of their capital account by debiting their capital accounts and crediting cash or bank account. It's just reverse, if there is a debited balance in the capital account, and then such partner should bring necessary cash in the business to balance off his/her capital account.


## Illustration :4

Long, Short and Thin were carrying on business in partnership sharing profits and losses in the ratio of $3: 2: 1$ respectively. They decided to dissolve the firm on 31st December, 2006 on which date their Balance Sheet stood as follows

| Liabilities | Rs | Assets | Rs |  |
| :--- | ---: | ---: | :--- | ---: |
| Creditors | 47,000 | Land and Building | 57,000 |  |
| Long's Loan A/c |  | 10,000 | Stock | 50,000 |
| Capital Accounts: |  | Debtors | 50,000 |  |
| Long |  | Cash | 3,000 |  |
| Short | 10,000 |  | Profit | 1,500 |
| Thin | 10,000 | $1,10,000$ | Short's Current A/c | 2,000 |
| Long's Current A/c | 1,500 | Thin's Current A/c | 5,000 |  |
|  |  | $1,68,500$ |  | $1,68,500$ |

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

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

## Solution

Realization Account

| Particulars | Rs | Particulars | Rs |
| :--- | ---: | :--- | :---: |
| To Sundry Assets: |  | By Sundry Creditors: | 47,000 |
| $\quad$ Land \& Buildings | 57,000 | By Cash A/c |  |
| Stock | 50,000 | Sale of Land \& Building | 40,000 |
| Debtors | 50,000 | Stock | 30,000 |
| To Cash (Expenses) | 1,200 | Debtors | 42,000 |
| To Cash (Sundry creditors) | 47,000 | Goodwill | 600 |
|  |  | By Loss on Realization: |  |
|  |  | Long 22,800 |  |
|  |  | Short 15,200 |  |
|  |  | Thin 7,600 | 45,600 |
|  | $2,05,200$ |  | $2,05,200$ |

Partner's Capital Accounts

| Particulars | Long <br> ( Rs) | Short <br> (Rs) | Thin <br> (Rs) | Particulars | Long <br> ( Rs) | Short <br> ( Rs) $)$ | Thin <br> $(\mathrm{Rs})$ |
| :--- | ---: | ---: | ---: | :--- | ---: | ---: | ---: |
| To Profit \& Loss A/c | 750 | 500 | 250 | By Balance b/d | 90,000 | 10,000 | 10,000 |
| To Short's Current A/c | - | 2,000 | - | By Long's Current A/c | 1,500 | - | - |
| To Thin's Current A/c | - | - | 5,000 | By Cash A/c | - | 7,842 | 1,425 |
| To Loss on Realization | 22,800 | 15,200 | 7,600 | By Long's Capital A/c | - | - | 1,283 |
| To Thin's Capital | 1,283 | 142 | - | By Short's Capital A/c | - | - | 142 |
| To Cash A/c | 66,667 | - | - |  |  |  |  |
|  | 91,500 | 17,842 | 12,850 |  | 91,500 | 17,842 | 12,850 |

Cash Account

| Particulars | $₹$ | Particulars | $₹$ |
| :--- | ---: | :--- | ---: |
| To Balance | 3,000 | By Realization ( Expenses) | 1,200 |
| To Realization (Sale of assets) | $1,12,600$ | By Sundry Creditors | 47,000 |
| To Shorts' Capital | 7,842 | By Long's Loan A/c | 10,000 |
| To Thin's Capital | 1,425 | By Long's Capital A/c | 66,667 |
|  | $1,24,867$ |  | $1,24,867$ |

## PIECEMEAL DISTRIBUTION

When the partnership firm is dissolved, its business comes to end. In this situation, generally it is assumed that all the assets are realized immediately on the date of dissolution and the accounts of all the partners and the creditor are settled on the same day. But in real practice, this assumption is unrealistic, because assets of the firm cannot be realized be realized immediately. There are sold gradually, therefore, it takes time. Similarly. Cash received on the sale of assets is paid as and when realized to the rightful claimant. In other words, the processes of realizing the assets takes o long time and cash is distributed as and when it is realized. The process of realizing the assets piece by piece or part by part and distributing the cash to the rightful claimant as and when the cash is received without waiting for the realization of all the assets of the firm is called piecemeal distribution.

On a gradual realization of assets, first of all, realization expenses are paid. After that, the debits of the firm to the third parties i.e. outside liabilities are paid. Then, the amount due to a partner as loan should be paid and finally, the capitals of the partners are paid.

There are two methods for distribution of cash under piecemeal distribution:

1. Surplus capital method or proportionate capital method
2. Maximum loss method

## Surplus capital method or proportionate capital method

This method is suitable when the capitals of the partners are not in profit sharing ratio as well as all the partners are solvent.

Under this method, a partner, who has the highest capital i.e. more than proportionate to other partners' capital in view of profit sharing ratio, is paid first the available cash to bring down his/her capital in proportionate to other. After that cash available id distributed to their profit sharing ratio. This process is continued till the available cash is distributed fully. Finally, the balance of capital account represent profit or loss on realization and this will be in the profit sharing ratio of each partner. This is proof of correctness of distribution of cash piece by piece.

The following steps are used in this method:

- First of all, adjusted capitals of the partners are determined by adjusting undistributed profit or loss, balance of current accounts, etc.
- After that, such adjusted capitals of the partners should be divided by their respective profit sharing ratio and get the minimum amount called. "Base capital.'
- Multiply 'Base capital' calculated in step b by respective profit sharing ratio of each partner and get 'Relative Capital.'
- Deduct 'Relative' calculated in step d by profit sharing ratio of each partner and get the minimum amount called 'Revised base Capital'.
- Again divide 'surplus capital' capital in step d by profit sharing ratio of each partner and get the minimum amount called 'Revised base Capital'.
- Multiple "Revised Base Capital' of step e by profit sharing ratio of each partner and get 'Revised Relative Capital'.
- Deduct 'Revised Relative Capital' of step F from 'surplus Capital' of step d and get' absolute surplus Capital'.
After all there, absolute surplus capital of a partner is returned first case. In case, the capitals are in profit sharing ratio. The cash is distributed among the partners in their profit sharing ratio.


## Maximum loss method

It is an alternative method of piecemeal distribution. After payment of all the outside liabilities and partners' loan, under this method, maximum possible loss an every realization is calculated. In other words, the amount available for distribution among partners is compared with the total amount of capital payable to the partners and the maximum loss is ascertained on the assumption that in future assets will not realize any amount. The maximum possible loss so ascertained is deducted from the capital balance of the partners in their profit sharing ratio and balance left in the capital account after deducting the maximum loss will be the amount payable to the partner.
If a partners' share of maximum possible loss exceeds the amount shown on credit side of such partner's capital account, then such partner should be treated as insolvent partner and his/her deficiency should be borne by solvent partners as stated under the garner vs. Murray rule. The amount standing to the credit of the partners after share of maximum loss and their share of insolvent partner's deficiency will be equal to the cash available for the distribution among the partners. This process of maximum possible loss is repeated till all the assets are disposed

## Illustration :5

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

Solution:
Statement Showing Surplus Capital

|  | A | B | C |
| :--- | ---: | ---: | ---: |
| Profit sharing ratio | 20,000 | 20,000 | 5,000 |
| Actual Capital <br> Capital's of partner's on the basis <br> of C's capital (C is having the <br> least capital) | 10,000 | 10,000 | 10,000 |
| Surplus Capital | 10,000 | ----------- | -------- |

Paying the surplus capital to A , the remaining capital should be distributed among all the partners among their capital sharing ratio of $2: 2: 1$.

## QUESTION BANK

## Section A

1. State the difference between dissolution of partnership and dissolution of partnership firm.
2. State the accounting treatment for:
i. Unrecorded assets
ii. Unrecorded liabilities
3. On dissolution, how will you deal with partner's loan if it appears on the (a) assets side of the balance sheet, (b) liabilities side of balance sheet.
4. Distinguish between firm's debts and partner's private debts.
5. State the order of settlement of accounts on dissolution.

## Section B

1. Explain the process dissolution of partnership firm?
2. What is a Realisation Account?
3. Reproduce the format of Realisation Account.
4. The book value of assets (other than cash and bank) transferred to Realisation Account is Rs. $1,00,000.50 \%$ of the assets are taken over by a partner Atul, at a discount of $20 \% ; 40 \%$ of the remaining assets are sold at a profit of $30 \%$ on cost; $5 \%$ of the balance being obsolete, realised nothing and remaining assets are handed over to a Creditor, in full settlement of his claim.
You are required to record the journal entries for realisation of assets.
5. Record necessary journal entries to record the following unrecorded assets and liabilities in the books of Paras and Priya:
a. There was an old furniture in the firm which had been written-off completely in the books. This was sold for Rs. 3,000,
b. Ashish, an old customer whose account for Rs. 1,000 was written-off as bad in the previous year, paid $60 \%$, of the amount,
c. Paras agreed to takeover the firm's goodwill (not recorded in the books of the firm), at a valuation of Rs. 30,000,
d. There was an old typewriter which had been written-off completely from the books. It was estimated to realize Rs. 400. It was taken away by Priya at an estimated price less $25 \%$,
e. There were 100 shares of Rs. 10 each in Star Limited acquired at a cost of Rs. 2,000 which had been written-off completely from the books. These shares are valued @ Rs. 6 each and divided among the partners in their profit sharing ratio.
6. All partners wishes to dissolve the firm. Yastin, a partner wants that her loan of Rs. 2,00,000 must be paid off before the payment of capitals to the partners. But, Amart, another partner wants that the capitals must be paid before the payment of Yastin's loan. You are required to settle the conflict giving reasons.
7. What journal entries would be recorded for the following transactions on the dissolution of a firm after various assets (other than cash) on the third party liabilities have been transferred to Reliasation account.
a) Arti took over the Stock worth Rs. 80,000 at Rs. 68,000 .
b) There was unrecorded Bike of Rs. 40,000 which was taken over By Mr. Karim.
c) The firm paid Rs. 40,000 as compensation to employees.
d) Sundry creditors amounting to Rs. 36,000 were settled at a discount of $15 \%$.
e) Loss on realisation Rs. 42,000 was to be distributed between Arti and Karim in the ratio of 3:4.

## Section C

1. Shilpa, Meena and Nanda decided to dissolve their partnership on March 31,2017. Their profit sharing ratio was $3: 2: 1$ and their Balance Sheet was as under:

Balance Sheet of Shilpa, Meena and Nanda as on March 31, 2017

| Liabilities | Amount (Rs.) | Assets | Amount (Rs.) |
| :---: | :---: | :---: | :---: |
| Capitals: |  | Land | 81,000 |
| Shilpa | 80,000 | Stock | 56,760 |
| Meena | 40,000 | Debtors | 18,600 |
| Bank loan | 20,000 | Nanda's capital | 23,000 |
| Creditors | 37,000 | Cash | 10,840 |
| Provision for doubtful debts | 1,200 |  |  |
| General reserve | 12,000 |  |  |
|  | 1,90,200 |  | 1,90,200 |

The stock of value of Rs. 41,660 are taken over by Shilpa for Rs. 35,000 and she agreed to discharge bank loan. The remaining stock was sold at Rs. 14,000 and debtors amounting to Rs. 10,000 realised Rs. 8,000. land is sold for Rs. 1,10,000. The remaining debtors realised $50 \%$ at their book value. Cost of realisation amounted to Rs. 1,200. There was a typewriter not recorded in the books worth Rs. 6,000 which were taken over by one of the Creditors at this value. Prepare Realisation Account.

2 Surjit and Rahi were sharing profits (losses) in the ratio of 3:2, their Balance Sheet as on March 31, 2017 is as follows:

Balance Sheet of Surjit and Rahi as on March 31, 2017

| Liabilities | Amount <br> (Rs.) | Assets | Amount <br> (Rs.) |
| :--- | ---: | :--- | ---: |
| Creditors | 38,000 | Bank | 11,500 |
| Mrs. Surjit loan | 10,000 | Stock | 6,000 |
| Reserve | 15,000 | Debtors | 19,000 |
| Rahi's loan | 5,000 | Furniture | 4,000 |
| Capital's: |  | Plant | 28,000 |
| Surjit | 10,000 | Investment | 10,000 |
| Rahi | 8,000 | Profit and Loss | 7,500 |
|  | 86,000 |  | 86,000 |

The firm was dissolved on March 31, 2017 on the following terms:
a) Surjit agreed to take the investments at Rs. 8,000 and to pay Mrs. Surojit's loan.
b) Other assets were realised as follows:

Stock Rs. 5,000

Debtors Rs. 18,500
Furniture Rs. 4,500
Plant Rs. 25,000
c) Expenses on realisation amounted to Rs. 1,600.
d) Creditors agreed to accept Rs. 37,000 as a final settlement.

You are required to prepare Realisation account, Partner's Capital account and Bank account.
3. Ashu and Harish are partners sharing profit and losses as $3: 2$. They decided to dissolve the firm on December 31, 2017. Their balance sheet on the above date was:

Balance Sheet of Ashu and Harish as on December 31, 2017

| Liabilities | Amount <br> (Rs.) | Assets | Amount <br> (Rs.) |  |
| :--- | ---: | ---: | :--- | ---: |
| Capitals: |  | Building | 80,000 |  |
| Ashu | $1,08,000$ |  | Machinery | 70,000 |
| Harish | 54,000 | $1,62,000$ | Furniture | 14,000 |
| Creditors |  | 88,000 | Stock | 20,000 |
| Bank overdraft |  | 50,000 | Investments | 60,000 |
|  |  | Debtors | 48,000 |  |
|  |  | Cash in hand | 8,000 |  |

Ashu is to take over the building at Rs. 95,000 and Machinery and Furniture is take over by Harish at value of Rs. 80,000 . Ashu agreed to pay Creditor and Harish agreed to meet Bank overdraft. Stock and Investments are taken by both partner in profit sharing ratio. Debtors realised for Rs. 46,000, expenses of realisation amounted to Rs. 3,000. Prepare necessary ledger account.

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[^0]:    *Balancing figure is either profit or loss

