## DJC2D: ADVANCED FINANCIAL ACCOUNTING

## Unit I

Self balancing and sectional balancing systems

## Unit II

Hire Purchase and instalment systems - royalty accounts - contract accounts accounting for empties and packages - investment accounts

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## Unit V

Insolvency - individual - firm - departmental and branch accounting

## Reference Books:

1. Advanced Accountancy - M.C. Shukla and T.S. Grewal, Sultan Chand, Publications, New Delhi
2. Advanced Accounting - R.L. Gupta and Radhaswamy, Sultan Chand, Publications, New Delhi
3. Advanced Accounting - Dr. Arulnandam and Dr. Raman, Himalaya Publishing house, Mumbai
4. Advanced Accounting - S.P. Lyengar, Chand \& Sons, New Delhi

## Self -Balancing Ledgers

As a business unit grows in size, it becomes necessary to open a large number of accounts of the customers and suppliers in addition to the other nominal and real accounts in the Ledger. If all these accounts are to be kept in a single Ledger, locating the error, if any, becomes difficult and time-consuming. The system of self balancing has been devised to make the task of locating the errors easy and prompt, so that the preparation of the trial balance need not be delayed unduly.

## Section System of Balancing Vs. Self-Balancing

A stage it is to be understood that there are two systems of balancing; they are (1) Sectional system of balancing, and (2) Self-balancing. In a small business unit where in all the different types of accounts such as personal accounts, real accounts and nominal accounts are maintained. When the business unit grows in size, maintaining all the accounts in one ledger will make the ledger unwieldy and the job of preparing the trial balance more difficult. It is for such a situation that the system of sectional balancing is designed.

The sectional system of balancing is very simple. Instead of one General Ledger for all accounts, the different ledger, viz., Debtors Ledger (Sold Ledger or Sales Ledger), Creditors Ledger (Bought Ledger or Purchase Ledger) and General Ledger (Nominal Ledger) are maintained. The accounts of all credit customers (i.e., debtors) are taken out of the General Ledger and placed in the Debtors Ledger. In the place of the individual debtors accounts so taken out, an account known as 'Total Debtors Account' showing, in total, all the transactions with the credit customers is prepared in the General Ledger, similarly, the accounts of the creditors are taken out of the General Ledger and put in the Creditors Ledger. In the place of all the creditors accounts so taken out, a 'Total Creditors Account' is prepared in the General Ledger. These two total accounts and the remaining accounts will from the General Ledger. Thus a firm will have three Ledgers:

General Ledger: Containing all the usual accounts except those relating to debtors and creditors but containing instead of a Total Debtors Account and a Total Creditors Account.

Debtors Ledger: Containing accounts of individual debtors only.
Creditors Ledger: Containing accounts of individual creditors only.
The total accounts in the General Ledger are posted in totals, where as the individuals' accounts in the Debtors or Creditors Ledger are posted with the individual transactions and, therefore, the total of the balances of individual customers or creditors should be equal to the balance shown by the Total Debtors Account or the Total Creditors Account respectively. If this is so, the Debtors Ledger and Creditors Ledger can be taken as correct. For the purpose of preparing Total Accounts, an analysis of the individual transactions concerned with the individual debtors or creditors should be made and the total figures ascertained. It is with these total figures the Total Accounts are constructed.

Total Debtors Account: The Total Debtors Account is a substitute account prepared in the Nominal Ledger for the accounts of the individual customers, but with total figures. A proforma of a Total Debtors Account is shown below:

## In the Nominal Ledger

Total Debtors Account

| Jan. 1 | To Balance b/d <br> To Credit Sales <br> To Bills receivable dishonoured To Sundry charge debited to customers | Rs. | Dec. 31 | By Cash received from Drs. <br> By Bills Receivable received <br> By Sales Return <br> By Allowance to customers <br> By Bad Debts w/off <br> By Balance c/d | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | - |
|  |  | - |  |  | - |
|  |  | - |  |  | - |
|  |  |  |  |  | - |
|  |  | - |  |  | - |
|  |  |  |  |  | - |
|  |  | - |  |  | - |

The balace shown by the Total Debtors Account on any date should agree with the total of the debit in Debtors Ledger, at that date. If not, there is some mistake either in the Total Debtors Account or the individual accounts.

Total Creditors Account: It is nothing but a summary of the individual creditors accounts prepared in the General Ledger. A proforma of the Total Creditors Account is given below:

## In the Nominal Ledger

Total Creditors Account

| Dec 31 | To Cash paid | Rs. |  |  | Rs. |
| :--- | :--- | ---: | :--- | :--- | ---: |
|  | To Bills payable accepted | - | Jan. 1 | By Balance b/d | - |
|  | To Purchase Return | - |  | By Credit Purchase | By Bills Payable dishonoured |
|  | To Discount Received | - |  |  | - |
|  | To Balance c/d | - |  |  |  |
|  |  | - |  |  | - |

The Credit Balance of the Total Creditors Account on any date should agree with the total of the credit balance in the individual creditors accounts as found in the Creditors Ledger. If so it may be concluded that there is no mistake in the total creditors account or in the individual creditors accounts.

## Illustration 3

From the following information prepare (1) Total Debtors 'Account and (2) Total Creditors' Account.

|  |  | Rs. |
| :--- | :--- | ---: |
| Jan 1, 1998: | Balance of Sundry Debtors | 32,000 |
| June 30, 1998: | Balance of Sundry Creditors | 37,000 |
|  | Credit Purchase | 9,000 |
|  | Credit Sales | 19,600 |
|  | Cash Sales | 1,500 |
|  | Cash Purchase | 1,000 |
|  | Paid to Creditors | 19,750 |

Discount allowed by them ..... 650
Cash received from debtors ..... 15,600
Discount allowed to them ..... 400
Bills payable accepted ..... 3,000
Bills receivable received ..... 6,000
Returns Inward ..... 1,750
Returns Outward ..... 1,200
Rebate allowed to debtors ..... 550
Rebate allowed to creditors ..... 300
Provision for doubtful debts ..... 320
Bad debts ..... 900
Bills receivable dishonoured ..... 750
Bad debts previously written off now recovered ..... 500

## In the Nominal Ledger

Total Debtors Account

| 1998 |  | Rs. | 1998 |  | Rs. |
| :--- | :--- | ---: | :---: | :--- | ---: |
| Jan. 1 | To Balance b/d | 32,000 | June 30 | By Cash received | 15,600 |
| June 30 | To Sales (Credit) | 19,600 | $"$ | By Discount allowed | 400 |
| June 30 | To B/R Dishonoured | 750 | $"$ | By B/R received | 6,000 |
|  |  |  | $"$ | By Returns Inward | 1,750 |
|  |  |  | $"$ | By Rebate allowed | 550 |
|  |  |  | $"$ | By Bad debts | 900 |
|  |  |  |  | By Balance c/d | 27,150 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Total Creditor's Account


Note: Cash Sales, Cash Purchases, Provision for Bad Debts and Bad Debts recovered will not appear in the Total Debtors Account since the Debtors or Creditors accounts are not affected by them.

## Illustration 4

From the following particulars as extracted from the books of Dochan \& Co., who keep a Debtors 'Ledger Creditors' Ledger and a General Ledger on the Self-balancing system, show how the various adjustment accounts will appear in each of the ledgers.

Rs.
Drs. Balance (1.1.98)
45,750
Crs. Balance(1.1.98)
54,900
Transactions for the month of January Credit Purchases 20,500
Credit Sales 22,700
Returns inwards 400
Return outwards 600
Cash received from customers 25,500
Bad debts written off 2,500
Sundry charges debited to customers 345
Discount received from Creditors 670
Discount allowed to customers 450
Cash paid to Creditors 30,700
Acceptances received from Debtors 8,500
Creditors bills accepted $\quad 12,000$
$B / R$ returned dishonoured $\quad 1,200$
$\mathrm{B} / \mathrm{P}$ dishonoured $\quad 3,000$
Allowances from creditors 275

Solution:
In the General Ledger
Debtor's Ledger Adjustment A/c

| 1998 |  | Rs. | 1998 |  | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | To Balance b/d | 45,750 | Jan. 31 | By General Ledger |  |
| Jan. 31 | To General Ledger |  |  | By Adjustment A/c |  |
|  | To Adjustment A/c |  |  | By Sales returns | 400 |
|  | To Credit Sales | 22,700 |  | By Cash received | 25,500 |
|  | To Sundry Charges | 345 |  | By Bad Debts | 2,500 |
|  | To B/R dishonoured | 1,200 |  | By Discount allowed | 450 |
|  |  |  |  | By $\mathrm{B} / \mathrm{R}$ received | 8,500 |
|  |  |  |  | By Balance c/d | 32,645 |
|  |  | 69,995 |  |  | 69,995 |
| Feb. 1 | To Balance b/d | 32,645 |  |  |  |

Creditors Ledger Adjustment Account

| $\begin{aligned} & \hline 1998 \\ & \text { Jan. } 31 \end{aligned}$ | To General Ledger <br> To Adjustment Account <br> To Purchases Return <br> To Cash paid <br> To Discount Received <br> To B/P accepted <br> To Allowance received <br> To Balance c/d | Rs. 600 30,700 670 12,000 275 34,155 | $\begin{array}{\|l\|} \hline 1998 \\ \text { Jan. } 1 \end{array}$ | By Balance b/d <br> By General Ledger <br> By Adjustment A/c <br> By Credit Purchases <br> By B/P dishonoured | $\begin{array}{r} \text { Rs. } \\ 54,900 \\ \\ 20,500 \\ 3,000 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 78,400 |  |  | 78,400 |
|  |  |  |  |  | 34,155 |

In the Debtors Ledger

## General Ledger Adjustment Account

| $\begin{aligned} & \hline 1998 \\ & \text { Jan. } 31 \end{aligned}$ | To Drs. Ledger <br> Adjustment Account: <br> To Sales returns <br> To Cash received <br> To Bad Debts <br> To Discount Allowed <br> To B/R received <br> To Balance $\mathrm{c} / \mathrm{d}$ | Rs. 400 25,500 2,500 450 8,500 32,645 | $\begin{aligned} & \hline 1998 \\ & \text { Jan. } 1 \\ & \text { Jan. } 31 \end{aligned}$ | By Balance c/d <br> By Drs. Ledger Adjustment Account: <br> By Credit Sales <br> By Sundry charges <br> By B/R dishonoured | $\begin{array}{r} \hline \text { Rs. } \\ 45,750 \\ \\ 22,700 \\ 345 \\ 1,200 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 69,995 | Feb. 1 | By Balance b/d | 69,995 |
|  |  |  |  |  | 32,645 |

In the Creditors Ledger
General Ledger Adjustment A/c

| 1998 - |  | Rs. | $\begin{array}{\|l\|} \hline 1998 \\ \text { Jan. } 31 \end{array}$ | By Crs. Ledger <br> Adjustment Account: <br> By Purchase returns <br> By Cash paid <br> By Discount Received <br> By B/P accepted <br> By Allowance received <br> By Balance c/d | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 | To Balance b/d | 54,900 |  |  |  |
| Jan. 31 | Crs. Ledger Adjustment |  |  |  |  |
|  | To Credit Purchases | 20,500 |  |  | 600 |
|  | To B/P dishonoured | 3,000 |  |  | 30,700 |
|  |  |  |  |  | 670 |
|  |  |  |  |  | 12,000 |
|  |  |  |  |  | 275 |
|  |  |  |  |  | 34,155 |
|  |  | 78,400 |  |  | 78,400 |
| Feb. 1 | To Balance b/d | 34,155 |  |  |  |

## Illustration 5

From the following balances prepare the necessary Adjustment Accounts in the Nominal Ledger:

|  |  | Rs. |
| :---: | :---: | :---: |
| $\text { Jan. } 11998$ | Balance of Sundry Debtors | 40,000(Dr.) |
|  | Balance of Sundry Debtors | 2,000(Cr.) |
| ‘, | Balance of Sundry Creditors | 37,000(Cr.) |
| ', | Balance of Sundry Creditors | 1,000(Dr.) |
| Transactions for January: |  |  |
|  | Cash and cheque received | 1,40,000 |
|  | Cash paid to creditors | 1,20,000 |
|  | Credit Sales as per sales book | 2,00,000 |
|  | Credit Purchases | 1,50,000 |
|  | Discount allowed | 6,000 |
|  | Discount received | 3,500 |
|  | Bad Debts written off | 3.000 |
|  | Bills Receivable received | 20,000 |
|  | Bills Payable accepted | 5,000 |
|  | Bills Receivable discounted | 2,000 |
|  | Transfer from Debtor's Ledger to Creditors Ledger | 1,000 |
|  | Transfer from Creditor's ledger to Debtors Ledger | 1,200 |
| Dec. 31 | Balance of Debtors | 6,000(Cr.) |
| ', | Balance of Creditors | 2,500(Dr.) |

## Solution

## In the General Ledger

## Debtors Ledger Adjustment Account

| $\begin{aligned} & \hline 1998 \\ & \text { Jan. } 1 \\ & \text { Jan. } 31 \end{aligned}$ | To Balance b/d <br> To General Ledger <br> Adjustment A/c <br> To Sales <br> To Balance c/d | $\begin{array}{r} \text { Rs. } \\ 40,000 \\ \\ 2,00,000 \\ 6,000 \end{array}$ | 1998 Jan. 1 Jan. 31 | By Balance b/d <br> By General Ledger <br> Adjustment A/c <br> By Cash \& Bank <br> By Discount allowed <br> By Bad Debts <br> By $B / R$ received <br> By Transfer to Crs. <br> By Ledger <br> By Transfer from Crs. <br> Ledger <br> By Balance c/d | $\begin{array}{\|r} \hline \text { Rs. } \\ 2,000 \\ \\ 1,40,000 \\ 6,000 \\ 3,000 \\ 20,000 \\ \\ 1,000 \\ \\ 1,200 \\ 72,800 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1998 |  | 2,46,000 |  |  | 2,46,000 |
| Feb. 1 | To Balance b/d | 72,800 |  |  |  |

## Creditors Ledger Adjustment Account

\begin{tabular}{|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
1998 \\
Jan. 1 \\
Jan. 31
\end{tabular} \& \begin{tabular}{l}
To Balance b/d General Ledger Adjustment A/c: \\
To Cash paid \\
To Discount received \\
To B/P accepted \\
To Transfer from Drs. Ledger \\
To Transfer to Crs. Ledger
\end{tabular} \& \[
\begin{array}{r}
\text { Rs. } \\
1,000 \\
\\
\\
1,20,000 \\
3,500 \\
5,000 \\
1,000 \\
1,200 \\
57,800 \\
\hline
\end{array}
\] \& 1998
Jan. 1

Jan. 31 \& | By Balance b/d General Ledger Adjustment A/c: |
| :--- |
| By Purchases |
| By Balance c/d | \& \[

$$
\begin{array}{r}
\hline \text { Rs. } \\
37,000 \\
\\
1,50,000 \\
2,500 \\
\\
\\
\hline
\end{array}
$$
\] <br>

\hline \& To Balance c/d \& 1,89,500 \& \& \& 1,89,500 <br>

\hline \& \& \& $$
\begin{aligned}
& 1998 \\
& \text { Feb. } 1
\end{aligned}
$$ \& By Balance b/d \& 57,800 <br>

\hline
\end{tabular}

## Hire Purchase and Instalment System

Hire purchase and instalment systems are considered as a special system, since they are combination of purchase and sale. These systems are considered as a revolution in bringing durable goods of high value to middle and lower middle class people, which were once available only to the rich and upper class people. These two systems have made the market expend.

### 17.1 Hire Purchase System

Goods which are purchased under hire purchase system are not immediately bought, but the purchaser has to pay the price in instalments. Goods are immediately delivered but ownership of the goods comes only when the last payment is paid and all the terms and conditions of the contract are fulfilled. Till then the goods are treated as on Hire. It is clear that Hire purchase is a trading system of retail business which agrees to sell the goods on the condition that the buyer pays the purchase price along with interest for a deferred fixed number of instalments. As the good are not legally sold out the ownership of the goods are not transferred along with the delivery of goods.

According to the Hire Purchase Act 1972-Section 2(c) "Hire purchase Agreement means an agreement under which goods are let on hire and under which the hire has an option to purchase them in accordance with the terms of the Agreement and includes an agreement under which
(i) Possession of goods is delivered by the owner thereof to a person on condition that such person pays the agreed amount in periodical instalments,
(ii) The property of the goods is to pass on to such person on the payment of the last of such instalment and
(iii) Such person has a right to terminate the Agreement at anytime before the property so passes."

### 17.4 Important Terms in Hire Purchases system

(i) Hirer-Hirer is a person who buys or in this case who obtains the possession of the goods from the owner as per the Hire purchase Agreement.
(ii) Hirer Vendor-Hirer vendor or the owner is a person who lets or who has delivered or delivers the goods to hirer under an agreement. Hire vendor is the seller of the goods on the hire purchase system.
(iii)Cash Price-The cash price is the price of the goods which can be purchased by cash or the retail price, if not purchased under hire purchase system.
(iv) Hire Purchase Price-It is the total amount payable by the hirer under the hire purchase agreement, in the agreed number of instalments for the purchase of goods. Hire purchase price is the total of cash price and interest.

Hire purchase price=Cash price+Interest
(v) Interest-Interest is the amount which is payable in addition to the actual cash price of the goods. It is the amount paid bythe buyer for the delayed and postponed payment.
(vi) HireInstalment-It is the amount payable periodically by the hirer or the buyer, instalment may be an equal amount or different amounts which are based on the agreement.
(vii) Down Payment or intial amount-The amount is a lump-sum out of the total Hire purchase price, payable to the vendor in advance while the agreement is signed, which does not carry any interest on it.

### 17.6Accounting Treatment of Hire Purchase System

The records in hire purchase system depend on the value of goods that are delivered. High value goods like Machinery, trucks etc, have a different treatment from those having small value having many individual customers like televisions, refrigerators, washing machine, motor cycles etc.,

## Accounting Treatment for High Value Goods

The high value goods with less number of customers for whom individual ledgers can be maintained by the hire-vendor. At the same time the Hire also maintain the assetA/c.

For such high value goods, two methods of records can be maintained.
(i) First method - Capitalising only the portion of cash price paid or asset accrual method.
(ii) Second method - Capitalising the full cash price or credit purchase with interest method.

Before recording the transactions in Hire purchase system, one has to be clear regarding the calculation of interest, hire purchase price and cash price of the Hire purchase Agreement. Interest calculation are common for both the methods, which has to be calculated before passing journal entries.

Hire purchase price - As already explained, Hire purchase price includes cash price and interest.

Hire purchase price $=$ Cash price + Interest
Cash price $=$ Hire purchase price - Interest
Interest $=$ Hire purchase price - Cash price

$$
\text { Cash price }=\text { Cost price }+ \text { Profit }
$$

therefore, Hire purchase price $=$ Cost price + Profit + Interest.
To solve the problems, one should make sure that all the three information are available i.e., cash price, interest and hire purchase price.

## First method

In this method cash price paid is alone capitalized. The asset account is debited with the amount of cash price paid in that instalment. This method as use that the title pages two the buyer only after the last instalment is paid. Unit then the seller is the owner. So as and when the instalment amount is paid the case price in the instalment is capitalized. In this method the goods are consider to the acquired only gradually when the cash price is paid each time.

## Journal entries

In the books of Hire- Purchaser or Hirer

## Date of signing 1. For down payment due the agreement <br> Asset A/c Dr <br> To Hire vendor's A/c <br> Date of sign only <br> The agreement <br> 2. For down payment paid Hire vendor's A/c Dr. To Cash A/c

Date of the
$1^{\text {st }}$ instalment
$"$

At the end of the accounting Year
$"$
3. For $1^{\text {st }}$ Instalment amount due

Asset A/c Dr. (Cash price in $1^{\text {st }}$ instalment) Interest A/c Dr. (Interest due in $1^{\text {st }}$ instalment) To Hire vendor's A/c (1st Instalment amount)
4. For the $1^{\text {st }}$ Instalment paid

Hire vendor's A/c Dr. To cash A/c
5. For providing depreceiation

Depreciation A/c Dr.
To Asset A/c
6. For transferring depreciation and interest to P\&L A/c P\&L A/c Dr

To Interest A/c
To Depreciation A/c

Note: Entries number:3,4,5 and 6 are to be repeated for second year and subsequent years till the last instalment is paid off.

## Second method:

In this method the full case price is capitalised. The hire purchaser debits the Asset account $\mathrm{A} / \mathrm{c}$ with full case price and credits the higher vendor $\mathrm{A} / \mathrm{c}$. this method assumes that the assets are consider to be acquired immediately when the position is taken. The purchaser enters into an agreement with the intention of fulfilling it.

## Journal entries

## In the books of Hire purchaser or Hirer

Date of signing 1. For the cash price of Asset purchased the agreement
"
Asset A/c Dr.
To Hire vendor's A/c (Total cash price)
2. For down Payment paid
Hire vendor's A/c Dr.
To Cash

Date of the
$1{ }^{\text {st }}$ Instalment
"

## 3. For Interest payable on the $1^{\text {st }}$ Instalment Interest $\mathrm{A} / \mathrm{c}$ Dr.

To Hire vendor's A/c
4. For payment of $1^{\text {st }}$ Instalment

Hire vendor's A/c Dr.
To Cash A/c

Date of closing 5. For providing the depreciation the accounts
$"$

Note: Entries no: $3,4,5 \& 6$ are to be repeated for $2^{\text {nd }}$ year and subsequent years till the last instalment is paid off.

## In the books of Hire vendor

Journal entries in hire vendor books are common for both the methods.

## Journal Entries

## In the Books of Hire vendor

1. For goods sold on hire purchase

Hire purchaser A/c Dr. (Total cash price)
To Hire sales A/c
2. For receipt of down payment

Cash A/c Dr.
To Hire purchaser A/c
3. For Interest receivable on $1^{\text {st }}$ Instalment

Hire Purchase A/c Dr.
To Interest $\mathrm{A} / \mathrm{c}$
4. For receipt of $\mathbf{1}^{\text {st }}$ Instalment

Cash A/c Dr.
To Hire purchaser A/c
5. For transferring interest to $\mathbf{P} \& \mathbf{L} \mathbf{A} / \mathbf{c}$

Interest $\mathrm{A} / \mathrm{c}$ Dr.
To P \& L A/c

Note: Entries $3,4 \& 5$ are to be repeated for $2^{\text {nd }}$ year and subsequent years till the last instalment is received.

## Interest Calculation

As already discussed on hire purchase price and cash price, we know that Interest amount (total) is the difference between hire purchase price and cash price. Hire purchase price is an higher amount than cash price since the interest payable is included. Interest is paid by the hire purchaser for the delayed payments that he makes. Interest receivable is the main source of income in hire purchase business. The seller gets Interest amount for the sacrifice he makes by receiving the amount after certain period but delivering the goods immediately.

## Total Interest $\boldsymbol{=}$ Hire purchase price $\boldsymbol{-}$ Cash price

Each Instalment amount includes cash paid towards the total amount and Interest due for that period

## Instalment amount $\boldsymbol{=}$ Cash price paid $\boldsymbol{+}$ Interest for the period

While calculating the interest make sure that the Instalment amount and cash price paid for the period are ascertained.

## The followings are the situations under which interest is calculated:-

1. When rate of interest, the total cash price and Instalment amounts are given.

Interest is calculated on the outstanding balance at a particular rate. Down payment does not carry Interest. Cash price paid (Instalment amount (given)- Interest) is deducted from the total cash price each year. The Interest for the last year is found by the difference between cash price outstanding and the amount of last Instalment.

## Illustration 1

Mr. Nirmal purchased a machine on hire purchase system on 1.1.2007. The total cash price of the machine is Rs. 29800, payable Rs. 8000 on $31^{\text {st }}$ December of every year for 3 years Rs. 8000 is payable on signing the agreement. Interest is charged at $5 \%$ p.a. Calculate interest payable by the buyer.
Solution
Table Showing Calculation of Interest

| Particulars | $\begin{array}{l}\text { Total cash } \\ \text { Price }\end{array}$ | $\begin{array}{c}\text { Interest } \\ \text { @ 5\% p.a. }\end{array}$ | $\begin{array}{c}\text { Instalment } \\ \text { (given) }\end{array}$ | $\begin{array}{c}\text { Cash price } \\ \text { Paid } \\ \text { (Inst-Int) }\end{array}$ |
| :--- | :--- | :--- | :---: | :--- |
| $\begin{array}{l}\text { Total cash price } \\ \text { (-)Down } \\ \text { payment }\end{array}$ | $\begin{array}{l}\mathbf{2 9 , 8 0 0 . 0 0} \\ \text { (-) I Instalment }\end{array}$ | $\begin{array}{l}\mathbf{8 , 0 0 0 . 0 0}\end{array}$ | - | $8,900.00$ |
| $\mathbf{6 , 9 1 0 . 0 0}$ |  |  |  |  |$)$

This method can be identified with the help of the following calculation.

## Total amount payable

| Down payment $=$ | Rs. |
| ---: | ---: |
| Instalmant amount |  |
| $(8000 \times 3)$ | $\underline{24,000}$ |
|  | 32,000 |
| $(-)$ Total cash price | $\underline{29,800}$ |
| Total Interest | $\underline{2,200}$ |

The total payable amount is more than the total cash price payable, so the difference is the total amount of interest. Therefore Rs. 8000 payable for 3 years is Instalment amount. Cash price paid has to be found out i.e.(Instalment amount - Interest).

## 2. When the rate of interest and total cash price are given and Instalment amount is not

 given:As in the first situation of calculating interest here also interest is calculated on the outstanding balance of total cash price. In the previous method, Instalment was given and cash rice paid of each Instalment was calculated. But here cash price paid is given and Instalment amount for each period has to be calculated. In this situation, Interest is calculated with a certain percentage till the last Instalment.

## Illustration 2

Sharma purchased a machine on hire purchase system on 1.4.2008. The cash price of the machine was Rs. $2,10,000$. According to the agreement, Rs. 60,000 to be paid on delivery. The balance to be paid in four Instalments of Rs. 37,500 each annually plus Interest. Interest is charged @ 20\%p.a. Calculate the Interest.

## Solution

Table Showing Calculation of Interest

| Particulars | Total Cash price | Interest <br> @ 20\% <br> p.a. | Instalment (cash price + Interest) | Cash price Paid (given) |
| :---: | :---: | :---: | :---: | :---: |
| Total cash price <br> (-)down payment | 2,10,000 | - | 60,000 | 60,000 |
|  | $\mathbf{6 0 , 0 0 0}$ |  |  |  |
|  | 1,50,000 | 30,000 |  |  |
| (-)I Instalment | 37,500 |  | 67,500 | 37,500 |
|  | 1,12,500 |  |  |  |
| (-)II Instalment | 37,500 | 22,500 | 60,000 | 37,500 |
|  | 75,000 |  |  |  |
| (-)III Instalment | 37,500 | 15,000 | 52,500 | 37,500 |
|  | 37,500 |  |  |  |
| (-)IV Instalment | 37,500 | 7,500 | 45,000 | 37,500 |
|  | Nill | 75,000 | 2,85,000 | 2,10,000 |

This method can be identified with the help of the following calculation.

## Total amount payable

 Rs. Down payment 60,000 Instalment amount| $(37500 \times 4)$ | $\underline{1,50,000}$ |
| ---: | :--- |
| $(-)$ Total cash price | $\underline{2,10,000}$ |
|  |  |

If the total cash price and total amount payable are equal, it means that interest is not included in the payable amount. Therefore Rs. 37,500 each for 4 years given is the cash price paid. So instalment amount has to be found out (i.e., cash price paid(given) + Interest)

## 3. When the rate of Interest and Instalment amount are given but the total cash price is not given.

In this situation, the total cash price is not given, but the amount of instalment is given in which Interest is also included. The rate of interest is also given. While computing the amount of interest, it can be seen that interest goes on decreasing from first year to subsequent years. Calculation of interest can be started from the last year to the first year. To find the total cash price, last year's cash price paid is added to the Instalment of previous year. For example if there are three years for which interest has to be calculated, then third year's cash price paid is added to the instalment of the second year, and adding the cash price of the third year and second year with the first year's instalment. Since interest is included in the instalment, interest can be found by this formula:

$$
\frac{\text { Rate of interest }}{\text { Rate of interest }+100}, \text { if } 5 \% \text { it will be } \frac{5}{100}
$$

## Illustration 3

Mr. Robert purchased a motorcycle on hire purchase system on 1.4.2008. As per the agreement he has to pay Rs.3,600 down and Rs.5,100 at the end of the first year, Rs. 4,800 at the end of second year and Rs. 16,500 at the end of the third and final year. Interest is charge @ $10 \%$ p.a. You are required to calculate Interest and the total cash price.

## Solution

Table Showing Calculation of Interest

| Particulars | Instalment | Interest @ 10\% |  | Cash price paid (Instalment Interest) |
| :---: | :---: | :---: | :---: | :---: |
| Down payment | 3,600 | (no interest on down Payment) | - | 3,600 |
| I Instalment | 5,100 | $[5100+15000+3000 \times 10 / 110]$ | 2,100 | $\begin{gathered} 3,000 \\ {[5,100-2,100]} \end{gathered}$ |
| II Instalment | 4,800 | [4800+15000×10/110] | 1,800 | $\begin{gathered} \mathbf{3 , 0 0 0} \\ {[\mathbf{4 , 8 0 0}-1,800]} \end{gathered}$ |
| III Instalment | 16,500 | [16500×10/110] | 1,500 | $\begin{gathered} 15,000 \\ {[16,500-1,500]} \end{gathered}$ |
|  | 30,000 |  | 5,400 | 24,600 |

Total cash price $=$ Rs. 24,600
Note: The calculation of interest is done starting from $3^{\text {rd }}$ year to $1^{\text {st }}$ year and Down payment is added with the cash price paid of each year to get the total cash price.
4. When Instalment amount and total cash price are give but the rate of interest is not given.

In this method, Instalment and the total cash price are given but the rate of interest is not given, but the interest is included in the each periods Instalent. This interest is calculated by taking the outstanding hire purchase price, i.e., the outstanding Instalments at the beginning of each year.

## Illustration 4

Mr. Mano has purchased a motor cycle on hire purchase system. The cash price is Rs. 52,000 which is sold for to 60,000 payable in four equal Instalments annually of Rs. 15,000 each. The first Instalment is made at the end of the first year. Calculate the Interest for each year.

## Solution

Table Showing Calculation of Interest

| Particulars | Outstanding <br> Instalment | Interest <br> Total Interest <br> Outstanding ratio | Instalment <br> (given) | Cash price paid <br> (Instalment - <br> Intrest) |
| :--- | :---: | :--- | :--- | :--- |
| I Instalment | $\mathbf{4}$ | $\mathbf{8 , 0 0 0 \times \mathbf { 4 / 1 0 = 3 , 2 0 0 }}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 1 , 8 0 0}$ |
| II Instalment | 3 | $\mathbf{8 , 0 0 0} \times \mathbf{3 / 1 0 = \mathbf { 2 , 4 0 0 }}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 2 , 6 0 0}$ |
| III Instalment | 2 | $\mathbf{8 , 0 0 0} \times 2 / 10=\mathbf{1 , 6 0 0}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 3 , 4 0 0}$ |
| IV Instalment | 1 | $\mathbf{8 , 0 0 0} \times \mathbf{1 / 1 0 = 8 0 0}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 4 , 2 0 0}$ |
|  | $\mathbf{1 0}$ | $\mathbf{8 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ | $\mathbf{5 2 , 0 0 0}$ |

## Calculation of total interest

Total amount payable(15000 4) 60,000
(-)Total cash price
52,000

Total interest
$\xrightarrow{8,000}$
Total Interest of Rs. 8,000 is to be divided on the outstanding Instalment ratio for the four years.

## Illustration 6

On 1.1.2006 Sujatha bought a machine from Chirtra \& Co on hire purchase system Rs. $1,20,000$ was the cash price, Rs. 30,000 down payment and at the end of 1 year Rs. 34,500 , II year Rs. 33000 and III year Rs. 31,500 was payable. The vendor charged interest @ 5\% and depreciation is provided @ $10 \%$ annually. Journalise the entries in the books of both the parties.

## Solution

I Table Showing the Calculation of Interest

| Particulars | Total cash Price | Interest @ 5\% | Instainment (given) | Cash price Paid (Instalment -Interest) |
| :---: | :---: | :---: | :---: | :---: |
| Total cash price (-)Down payment | 1,20,000 | 4,500 | 30,000 | 30,000 |
|  | 30,000 |  |  |  |
|  | 90,000 |  |  |  |
|  | 30,000 |  | 34,500 | 30,000 |
| I Instalment | 60,000 | $\mathbf{3 , 0 0 0}$ | 33,000 | 30,000 |
|  | $\mathbf{3 0 , 0 0 0}$ |  |  |  |
| II Instalment | $\begin{aligned} & 30,000 \\ & 30,000 \end{aligned}$ | 1,500 | 31,500 | 30,000 |
| III Instalment |  |  |  |  |
|  | - | 9,000 | 1,29,000 | 1,20,000 |


| Date | Particulars | 2006 |  | 2007 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Debits } \\ \text { Rs } \end{gathered}$ | $\begin{gathered} \text { Credit } \\ \text { Rs } \end{gathered}$ | $\begin{gathered} \text { Debits } \\ \text { Rs } \end{gathered}$ | $\begin{aligned} & \hline \text { Credits } \\ & \text { Rs } \end{aligned}$ | $\begin{gathered} \text { Debits } \\ \text { Rs } \end{gathered}$ | $\begin{gathered} \hline \text { Credits } \\ \text { Rs } \end{gathered}$ |
| Jan 1 | Machinery A/c Dr To Chitra\&Co A/c [Total cash price] | 1,20,000 | 1,20,000 | - | - | - | - |
| " | Chitra \& Co A/c Dr <br> To Cash A/c  <br> [Down payment]  | 30,000 | 30,000 | - | - | - | - |
| Dec 31 | Interest A/c $\quad$ Dr <br> $\quad$ To Chitra \& Co A/c <br> [Instalment amount <br> paid] | 4,500 | 4,500 | 3,000 | 3,000 | 1,500 | 1,500 |
| " | Chitra \& Co A/c Dr <br> $\quad$ To Cash A/c  <br> [Instalment amount  <br> paid]  | 34,500 | 34,500 | 33,000 | 33,000 | 31,500 | 31,500 |
| " | $\begin{gathered} \text { Depreciation A/c } \quad \mathrm{Dr} \\ \text { To Machine A/c } \\ \text { [Depreciation charge] } \\ \hline \end{gathered}$ | 12,000 16,500 | 12,000 | 10,800 | 10,800 | 9,720 | 9,720 |
| " | P \& L A/c Dr  <br> To Interest A/c   <br> To Depreciation   <br> [transferred to $\mathbf{p}$ \& L A/c] | 16,500 | $\begin{array}{r} 4,500 \\ \mathbf{1 2 , 0 0 0} \end{array}$ | 13,800 | $\begin{array}{r} \mathbf{3 , 0 0 0} \\ \mathbf{1 0 , 8 0 0} \end{array}$ | 11,220 | $\begin{aligned} & \mathbf{1 , 5 0 0} \\ & \mathbf{9 , 7 2 0} \end{aligned}$ |

III Journal Entries in the Books of Chitra \& Co

| Date | Particulars | 2006 |  | 2007 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Debits } \\ \text { Rs } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Credit } \\ \text { Rs } \end{gathered}$ | $\begin{gathered} \text { Debits } \\ \text { Rs } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Credits } \\ \text { Rs } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Debits } \\ \text { Rs } \end{gathered}$ | $\begin{gathered} \hline \text { Credits } \\ \text { Rs } \\ \hline \end{gathered}$ |
| Jan 1 | Sujatha A/c Dr To Hire sales A/c [Total Cash price] | 1,20,000 | 1,20,000 | - | - | - | - |
| " | Cash A/c Dr <br> To Sujatha A/c <br> [Down Payment] | 30,000 | 30,000 | - | - | - | - |
| Dec <br> 31 | Sujatha A/c $\quad \mathrm{Dr}$ To Interest $\mathrm{A} / \mathrm{c}$ [Interest due] | 4,500 | 4,500 | 3,000 | 3,000 | 1,500 | 1,500 |
| " | Cash A/c To Sujatha A/c [Instalment received] | 34,500 | 34,500 | 33,000 | 33,000 | 31,500 | 31,500 |
|  | Interest A/c $\quad$ Dr $\quad$ To P \& L A/c [transferred to p \& L A/c] | 4,500 | 4,500 | 3,000 | 3,000 | 1,500 | 1,500 |

### 17.10 Instalment - purchase system

Instalment purchase system where an agreement to purchase and sale is made between the buyer and the seller, here there is an immediate sale on signing the agreement. In actual purchase the price of the goods is paid in lump-sum, but in instalment system instead of paying in a lumpsum, it is spread over a period, interest is being paid on the unpaid balance. This interest amount is determined at the time of signing the agreement itself. The possession of the goods is taken by the buyer after signing the contract itself. The basic difference between instalment system and hire purchase system is the transfer of ownership. In instalment system the title or the ownership is immediately passed to the purchaser, but in the hire purchase system until the entire amount to the last instalment is paid the ownership with the vendor. In case the purchaser makes default of any payment, the seller has no right to repossess like in the hire purchase system, but he can recover the amount due to him by filing a suit in the court of law and can recover the unpaid amount since the buyer is the legal owner of the goods he has every right to sell, transfer, exchange or even destroy it.

### 17.11 Different between Hire purchase and Instalment purchase system

| Hire Purchase |
| :--- | :--- |
| 1. In Hire purchase system, ownership of |
| the goods lies with the vendor until the |
| buyer pays his last instalment. |
| 2. The agreement of hire purchase is |
| contract of hire but later on it becomes |
| sale. |
| 3. In hire purchase system the relation |
| between the parties is that of Hirer and |
| Hire vendor. |
| 4. The relationship between the parties are |

In Instalment purchase system the ownership is transferred to the buyer on signing the agreement.

The agreement of Instalment purchase is that of agreement of sale.

In Instalment purchase system the relation between the parties is that of buyer and seller.

The relationship between the parties are that of debtor and creditor until the last instalment is paid.
5. The hirer has no right to sell the goods until the ownership is transferred to him.
6. In case of default by the hirer, the hire vendor has the right to repossess the goods.
7. In hire purchase both the parties can terminate the agreement and return the goods.
8. The hire purchase system is under Hire purchase Act of 1972.
9. The Instalment in hire purchase has hire charges plus capital part and interest.

## Instalment System

that of Bailor and Bailee.

The buyer has all the right, to sell, exchange or transfer the goods at the time of paying instalments.

In case of default by the buyer, the seller cannot repossess the goods, but he can legally recover the dues.

In Instalment purchase the agreement cannot be terminated.

The Instalment purchase comes under the sale of Goods Act of 1930.

The Instalment here consists of the part of capital and interest on the outstanding capital.

## Accounting Treatment

## Journal entries

## In the book of Buyer

## 1. When the goods is purchased:

| 1 year |  |  |
| :---: | :--- | :--- |
| Jan 1 | Asset A/c | Dr. |
|  | Interest suspenses A/c | Dr.(Total cash price) |
|  |  | To seller A/crest) |$\quad$| (Total instalment |
| :---: |
|  |

2. When the down payment is paid:

Seller A/c Dr.
To cash A/c
3. When the interest is due for the year

Dec 31 Interest $\mathrm{A} / \mathrm{c}$ Dr. To interest suspense $\mathrm{A} / \mathrm{c}$
4. When the $I$ instalment amount is paid

Dec 31 Seller A/c Dr.
To cash A/c
5. When depreciation is charged on the asset
$\begin{array}{cc}\text { Depreciation A/c Dr. } \\ \text { To Asset A/c } & \end{array}$
6. When the interest and depreciation is transferred to P\&L A/c

P\&L A/c Dr.
To Interest A/c
To Depreciation A/c

Note: For second and subsequent years entries No (3), (4), (5) and (6) are to be repeated

## In the books of seller

1. When the goods are sold

Jan 1

$$
\begin{array}{cc}
\text { Buyer A/c Dr. (Total Instalment Purchaser) } \\
\text { To Sales a/c } & \text { (Total cash price) } \\
\text { To Interest suspenses A/c } & \text { (Total interest) }
\end{array}
$$

2. When the down payment is received

Cash A/c Dr.
To Buyer A/c
3. When Interest is due for the year

Dec 31 Interest suspense $\mathrm{A} / \mathrm{c}$ Dr.
To Interest A/c
4. When the I Instalment amount his received

Cash A/c
Dr.
To Buyer A/c
5. When the interest is transferred to P\&L A/c

Interest $\mathrm{A} / \mathrm{c}$
Dr.
To P\&L A/c

Note: For second and subsequent years entries no (3), (4), and (5) are to be repeated.

## Partnership Accounts - I <br> Introduction

The simplest form of organization is the sole trading organization as it is owned and carried by a person, at his risk. There arises situation where the business needs more capital, moe persons, better decision making etc., due to expansion of the business. To meet these requirements two or more persons join together to carry the business, where they are called as joint owners. Theses joint owner's twings some amount of capital to run the business and agree to share the profits in the agreed proportions. The relationship between the interested person is called as partnership.

Partnership is regulated under the Indian Partnership Act, 1932. This Act come into effect from $1^{\text {st }}$ October 1932. According to section A of the Indian partnership Act, 1932 "Partnership is the relation between persons who have agreed to share the profit of them acting for all". Each person of partnership is called as partner, collectively called as Firm. The name under which their business is carried on is called Firm's name.

### 18.1 Essential of Partnership:

1. Partnership comes into existence as a result of an agreement between parties, this agreement can be expressed or implied.
2. Agreement must be to earn profit of the business and share among its partners.
3. This is created in order to run business lawfully.
4. Such business should be carried on by all or any of them acting for all.
5. There must be at least two persons to run the partnership maximum of twenty, but maximum of ten in case of banking business.
6. There must be mutual and implied agency, every partner is an agent as well as principal of the other partners.

### 18.2 Types of partners

In a partnership firm there may different types of partners and some of them are

1. Active partner - Such partners are actively engaged in the business, they are also called as actual partner's f ostensible partners.
2. Sleeping partner - Such partner who does not take part in the conduct of the business, they are also called as Dormant partner.
3. Nominal partner - This type partner lends his name to the firm without any actual interest in terms of investing capital.
4. partner in profit only - This type of partner agree to be partner for profit amount, he does not takes risk of sharing losses.
5. Partner by Estoppel - Such partner becomes partner by words, spoken or words written or by represents itself or permits to be represented to be a partner in the firm, who is not a real partner in the firm, who is not a real partner.
6. Sub - partner - If a partner agrees to give his share of partner to an outsider, such outsider who gets the share in profit of the firm is called as sub-partner.

### 18.3 Partnership Deed

Partnership is an outcome of an agreement created orally or in writing between two or more persons. It is not essential that agreement must be in writing, but to avoid any disputes between the parties in future, it is better to put in writing. This document which contains the terms and conditions of the partnership in writing is called as partnership deed. It is a stamped document which usually contains the following.

1. The name of the firm.
2. Name and address of the partners
3. Name of the partnership business.
4. The period of the business, if any.
5. The commencement of business.
6. Capital contributed by each partner.
7. Nature of the capital i.e., Fixed or fluctuating
8. The proportion of sharing the profits or losses.
9. Amount and period of drawings.
10. Interest rate on capital, drawings etc.,
11. Commission salary, allowance atc payable to partners, if any.
12. Valuation method of goodwill and its treatments on admission, retirement or death of partners.
13. Procedure by which a partner's account has to be settled and mode of payment.
14. Rights and duties of partners.
15. Under what situation the firm stands dissolved.
16. The ways of keeping accounts, their audit etc.

### 18.5 Accounts of partnership Firm

The partnership firm's accounts are recorded on the doubleentry system of book keeping principles. These accounts are maintained in the same manner as a sole trade. In partnership there are two or more partners, each partner's capital account has to be maintained separately. The partnership deed usually indicates the method of maintaining partner's capital account.

In the partnership accounts, there would be a different capital account for each partner. Whenever a partner invests capital in the business, the entry would be
Cash/Bank A/c

Dr. xxx

To Partner's capital A/c
$\mathbf{x x x}$

The capital accounts may be prepared under two methods:
(a) Fixed capital method
(b) Fluctuating capital method

## Fixed Capital Method

The capital account of a partner remains fixed and naturally no entry is required to be passed for sharing profits, drawings or any other adjustments like interest on capital, interest of drawings, partner's salaries and commission etc.

Technically speaking, capital account would show the same balance year after year from the very beginning, except for additional capital to be introduced by the partners. A separate "Current Account" is to be opened for every partner where all the necessary adjustments including drawings, interest on drawings, interest on capital, salary etc., are to be adjusted. However, at the end of the year, when the accounts are to be closed, it will either show a debit or a credit balance which would ultimately be transferred to the balance sheet.
The proforma for capital and current account under fixed capital method is as follows:
Dr. Capital Account
Cr.

| Particulars | $\begin{gathered} \text { A } \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \text { B } \\ \text { (Rs.) } \end{gathered}$ | Particulars | $\begin{gathered} \text { A } \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \text { B } \\ \text { (Rs.) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Balance c/d | Xxx | xxx | By Balance b/d <br> By Balance b/d | xxx | xxx |
|  | Xxx | xxx |  | xxx | xxx |
|  |  |  |  | xxx | xxx |

## Current Account

Dr.

| Particulars | $\begin{gathered} \hline \text { A } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { B } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | Particulars | $\begin{gathered} \text { A } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { B } \\ \text { (Rs.) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Drawings A/c | xxx | xxx | By Interest on |  |  |
| To interest on |  |  | capital | xxx | xxx |
| Drawings | xxx | xxx | By Salary | xxx | xxx |
| To Share of Loss | xxx | xxx | By Commission | xxx | xxx |
| To balance c/d | xxx | xxx | By Share of Profit | xxx | xxx |
|  | xxx | xxx |  | xxx | xxx |

## Fluctuating Capital Method

In this method, capital account is prepared by taking the opening balance of capital and all the adjustments such as interest on capital drawings, salary etc., are made in the capital account itself. So, the balance would keep changing every year and hence it is termed as 'Fluctuating capital method'.

## Fluctuating Capital Account

| Dr. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | $\begin{gathered} \mathrm{X} \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ \text { (Rs.) } \end{gathered}$ | Particulars | $\begin{gathered} \text { X } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ \text { (Rs.) } \end{gathered}$ |
| To Drawings | xxx | xxx | By Balance b/d By Interest on capital | xxx | xxx |
| To Interest on Drawings | xxx | xxx | By Commission <br> By Salary |  |  |
| To Share of Loss | xxx | xxx | By Share of Profit |  |  |
| To balance c/d | xxx | xxx |  |  |  |
|  | Xxx | xxx |  | xxx | xxx |

## Fixed capital method

## Illustration 1

Write up the capital and current accounts of partners A and B from the following:

| Particulars | A <br> (Rs.) | B <br> (Rs.) |
| :--- | ---: | ---: |
| Capital on 1.1.08 | $4,00,000$ | $3,50,000$ |
| Current Accounts on 1.1.08(Cr.) | 2,000 | 1,000 |
| Drawings during 2008 | 80,000 | 70,000 |
| Interest on drawings | 2,000 | 1,000 |
| Share of Profit for 2008 | 42,000 | 33,000 |
| Interest on Capital | $6 \%$ | $6 \%$ |
| Salary | 36,000 | Nill |

## Solution

## Capital Accounts

Dr. Cr.

| Date | Particulars | $\begin{gathered} \text { A } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { B } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | Date | Particulars | $\begin{gathered} \text { A } \\ \text { (Rs.) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { B } \\ \text { (Rs.) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2008 \\ \operatorname{Dec} 31 \end{gathered}$ | To Balance c/d |  |  | $\begin{aligned} & 2008 \\ & \text { Jan } 1 \end{aligned}$ | By balance b/d |  |  |
|  |  | 4,00,000 | 3,50,000 |  |  | 4,00,000 | 3,50,000 |
|  |  | 4,00,000 | 3,50,000 |  |  | 4,00,000 | 3,50,000 |
|  |  |  |  | $\begin{aligned} & 2009 \\ & \text { Jan } 1 \end{aligned}$ | By Balance b/d | 4,00,000 | 3,50,000 |

## Current Accounts

Dr. Cr.


## Illustration 2

Prepare capital accounts of partners Karthik and Ashok assuming that the accounts are fluctuating:

| Particulars | Karthik <br> (Rs.) | Ashok <br> (Rs.) |
| :--- | ---: | ---: |
| Capital on 1.1.2009 | $4,00,000$ | $3,50,000$ |
| Drawing during the year | 70,000 | 40,000 |
| Interest on Capital @ 6\% | $?$, | $?$ |
| Interest on drawings | 4,500 | 2,200 |
| Profit share for the year | 17,000 | 14,000 |
| Salary | 23,000 | - |
| Commission | - | 10,000 |

## Solution

## Capital Accounts

(Fluctuating Method)
Dr.
Cr.

| Date | Particulars | Karthik <br> (Rs.) | Ashok (Rs.) | Date | Particulars | Karthik <br> (Rs.) | $\begin{gathered} \hline \text { Ashok } \\ \text { (Rs.) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | To Drawings <br> To Interest on drawings <br> To Balance $\mathrm{c} / \mathrm{d}$ | 70,000 | 40,000 | 2009 |  |  |  |
| ${ }^{\text {Dec } 31}$ |  |  |  | Jan 1 Dec 31 | By Balance b/d | 4,00,000 | 3,50,000 |
| Dec 31 |  | 4,500 | 2,200 | Dec 31 | By Interest capital @ $6 \%$ | 24,000 |  |
|  |  | 3,89,500 | 3,52,800 | Dec 31 | By Profit | 17,000 | 14,000 |
|  |  |  |  | 3131 | By Salary <br> By Commission | 23,000 |  |
|  |  |  |  |  |  |  | 10,000 |
|  |  | 4,64,000 | 3,95,000 |  |  | 4,64,000 | 3,95,000 |

## Interest on capital

There is no implied authority to allow interest on capital unless the partnership deed provides for it. There must be an expression for providing interest on capital at a specific rate in the partnership deed. Interest n capital is calculated on the opening balance of the partner's capital. If the opening capital is not provided in the problem, opening capital has to be ascertained by deducting the profit and additional capital introduced from te closing balance of capital and adding the drawings made during the year.

Calculation of Opening Capital

| Particulars | Rs. | Rs. |
| :--- | :--- | :--- |
| Capital at the end of the year |  | xxx |
| Add: |  |  |
| $\quad$ Drawings | xxx |  |
| Interest on drawings | xxx |  |
| Loss made during the year | xxx | xxx |
| Loss: |  | xxx |
| $\quad$ Inerest on capital allowed | xxx |  |
| $\quad$ Additional capital introduced | xxx |  |
| $\quad$ Profit made during the year | xxx | xxx |
| Capital at the beginning of the year |  | xxx |
|  |  |  |

## Journal Entries to be Passed to Adjust the Interest on Capital

| Particulars | L.F | Debit <br> (Rs.) | Credit <br> (Rs.) |  |
| :--- | :--- | :--- | :--- | :--- |
| Interest on Capital A/c <br> To Partner's Capital A/c <br> (or) | Dr. |  | xxx | xxx |
| To Partner's Current A/c <br> [Being interest on capital allowed <br> Credited to partner's capital] |  |  |  |  |
| Profit \& Loss appropriation A/c <br> To interest on capital A/c <br> [Being interest on capital transferred <br> to P\&L appropriation account] | Dr. |  | xxx |  |

### 18.6 Methods to calculate interest on drawings



## Interest on drawings, when fixed amount is drawn in intervals

## Illustration 6

Nimmy, Vimmy and Kimmy are partners in a firm carrying on business. Interest is to be charged on drawings @ $10 \%$ p.a. Calculate the interest to be charged on drawings when:-
(a) Nimmy draws Rs. 1,000 respectively at the end of each month
(b) Vimmy draws Rs. 1,500 respectively at the middle of each month
(c) Kimmy draws Rs. 2,250 respectively at the beginning of each month

## Solution

(a) Interest on drawings for Nimmy (draws Rs. 1,000 at the end of each month)

Total drawings for the year $=$ Rs. $1,000 \times 12=$ Rs. 12,000

$$
\begin{aligned}
& \text { Interest on drawings }=\text { Rs. } 12,000 \times \frac{10}{100} \times \frac{5 \frac{1}{2}}{12} \\
&=\text { Rs. } 12,000 \times \frac{10}{100} \times \frac{11}{24} \\
&=\text { Rs. } 550
\end{aligned}
$$

(b) Interest on drawings for Vimmy (draws Rs. 1,500 at the middle of each month)

Total drawings for the year $=$ Rs. $1,500 \times 12=$ Rs. 18,000
Interest on drawings for Vimmy $=$ Rs. $18,000 \times \frac{10}{100} \times \frac{6}{12}$

$$
=\text { Rs. } 900
$$

(c) Interest on drawings for Kimmy (draws Rs. 2,250 at the beginning of each month)

Total drawings for the year $=$ Rs. $2,250 \times 12=$ Rs. 27,000

$$
\begin{aligned}
\text { Interest on drawings } & =\text { Rs. } 27,000 \times \frac{10}{100} \times \frac{61 / 2}{12} \\
& =\text { Rs. } 27,000 \times \frac{10}{100} \times \frac{13}{24}
\end{aligned}
$$

$$
=\text { Rs. } 1,462.50
$$

## When drawings are made at different intervals

## Illustration 7

In a partnership, partners are charged interest on drawings @ 6\% p.a. During the year ended $31^{\text {st }}$ Dec 2008, a partner drew as follow.

|  | Rs. |
| :--- | ---: |
| Feb 1 | $\mathbf{1 2 , 7 5 0}$ |
| May 1 | $\mathbf{4 6 , 7 5 0}$ |
| June 1 | $\mathbf{1 2 , 7 5 0}$ |
| October 1 | 55,250 |
| December 1 | 17,000 |

What is the interest chargeable to the partner?
Solution

| Date of drawings | $\begin{aligned} & \text { Months upto } \\ & \text { 31.12.2008 } \\ & \text { (b) } \\ & \hline \end{aligned}$ | Amount (Rs.) (c) | Product Rs. (bxc) |
| :---: | :---: | :---: | :---: |
| Feb 1, 2008 | 11 | 12,750 | 1,40,250 |
| May 1,2008 | 8 | 46,750 | 3,74,000 |
| Jun 1, 2008 | 6 | 12,750 | 76,500 |
| Oct 1, 2008 | 2 | 55,250 | 1,10,500 |
| Dec 1, 2008 | 0 | 17,000 | 0 |
|  |  | Total | 7,01,250 |

Interest on drawings $=$ Rs. $7,01,250 \times \frac{6}{100} \times \frac{1}{12}$

$$
=\text { Rs. } 3,506.25
$$

### 18.9 Profit and loss appropriation account

In a partnership firm, there may be various adjustments such as, interest on capital and drawings, salary to partner interest on loan to partner's loan account etc. These adjustments would be carried out at the year end after arriving at the net profit from the profit and loss account.

Then a separate account called 'Profit and Loss Appropriation account would be prepared with a view to adjust the above mentioned adjustments and transfer the surplus to the partner's capital (or) current account. Thus, profit and loss appropriation is an extension of profit and loss account.

The format of profit and loss appropriation account is as follows:

Dr.

| Particulars | Rs. | Rs. | Particulars | Rs. | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Net loss b/d |  | xxx | By Net Profit b/d |  | xxx |
| (transferred from |  |  | (transferred from |  |  |
| Profit \& loss A/c) |  |  | Profit \& loss A/c) |  |  |
| To interest on capital |  | xxx | By Interest on drawings |  | xxx |
| To interest on loan |  | xxx | By Net loss to |  | xxx |
| To Partner's salary |  | xxx | Partner's capital or |  |  |
| To Partner's commission |  | xxx | Current A/c |  |  |
| To Net profit to |  | xxx |  |  |  |

## Illustration 8

$\mathrm{X}, \mathrm{Y}$ and Z are in partnership and during the year 2008 earned Rs. 1,66,000 as profit. X and Y are entitled to interest at $5 \%$ p.a. on their capitals of Rs. $1,20,000$ and Rs. $2,00,000$ respectively. Z who has no capital in the firm, is entitled to a salary of Rs. 24,000 p.a. Z is also entitled to a commission of $5 \%$ on the profits after charging interest, salary and commission.

It is further agreed that the residue of profits should be appropriated as to $20 \%$ for charity fund and the balance shared equally by X and Y .

The drawings of the partner's were as follows:
X: Rs. 20,000; Y: Rs. 18,000; Z: Rs. 26,000
Prepare P \& L appropriation A/c, and partner's capital A/c's for the year 2008.

## Solution

## Profit and Loss Appropriation Account <br> For the Year Ended 31.12.2008

Dr.
Cr.

| Particulars | Rs. | Rs. | Particulars | Rs. | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Interest on capital |  |  | By Net profit b/d |  | 1,66,000 |
| X(Rs. 1,20,000×5\%) | 6,000 |  |  |  |  |
| Y(Rs. 2,00,000×5\%) | 10,000 | 16,000 |  |  |  |
|  |  | 24,000 |  |  |  |
| To salary to Z |  | 6,000 |  |  |  |
| To commission to $\mathrm{Z}(1)$ |  | 24,000 |  |  |  |
| To charity fund (2) |  |  |  |  |  |
| To Net profit transferred to |  |  |  |  |  |
| X's current A/c | 48,000 |  |  |  |  |
| Y's current A/c | 48,000 | 96,000 |  |  |  |
|  |  | 1,66,000 |  |  | 1,66,000 |

## Working Note:

1. Commission to $\mathrm{Z}=($ Rs. $1,66,000-$ Rs. $16,000-$ Rs. 24,000

$$
=\text { Rs. } 1,26,000 \times \frac{5}{105}=\text { Rs. } 6,000
$$

2. Charity fund $=($ Rs. $1,66,000-$ Rs. $16,000-$ Rs. $24,000-$ Rs. 6,000$)$

$$
=\text { Rs. } 1,20,000 \times 20 \%=\text { Rs. } 24,000
$$

3. Since there is current account, all the adjustments including profit should be transferred to current account of respective partner's only.

## Partner's Capital Account

Dr.

| Date | Particulars | $\begin{gathered} \mathrm{X} \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \text { Z } \\ \text { (Rs.) } \end{gathered}$ | Date | Particulars | $\begin{gathered} \mathrm{X} \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ \text { (Rs.) } \end{gathered}$ | $\begin{gathered} \text { Z } \\ \text { (Rs.) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2008 \\ \text { End } \end{gathered}$ | To Balance c/d | 1,20,000 | 2,00,000 | - | $\begin{gathered} 2008 \\ \text { Beg } \end{gathered}$ | By Balance c/d | 1,20,000 | 2,00,000 | - |
|  |  | 1,20,000 | 2,00,000 | - |  |  | 1,20,000 | 2,00,000 | - |
|  |  |  |  |  | $\begin{gathered} 2008 \\ \text { Beg } \end{gathered}$ | By Balance c/d | 1,20,000 | 2,00,000 | - |

## Past Adjustments:

Situations may arise, where it may be required to adjust the capital account of partners that have been already closed. Following are these situations:
(i) Omission of interest of Capital/Drawings
(ii) Omission of any expenses outstanding
(iii) Change in profit sharing ratio from the retrospective date

## Steps in solving problems relating to past Adjustments

(a) Calculate the interest on capital. To calculate the interest on capital, compute opening capital.
Opening capital $=$ Closing capital ( - ) Profit ( + ) Drawings.
(b) Then prepare "Profit and Loss Adjustment" Account transfer the balance to the partner's Capital Account in their profit sharing ratio.

## Profit and Loss Adjustment Account

Dr.
Cr.

(c) Prepare the Capital Accounts:

Capital Accounts

| Date | Particulars | $\begin{gathered} \mathbf{X} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathbf{Y} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathbf{Z} \\ \text { Rs. } \end{gathered}$ | Date | Particulars | $\begin{gathered} \mathbf{X} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathbf{Y} \\ \text { Rs. } \end{gathered}$ | $\begin{array}{r} \mathbf{Z} \\ \text { Rs. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | To Interest on drawings <br> To Profit and Loss Adj A/C | xxx | xxx | xxx |  | By Balance b/d <br> (1) <br> By Interest on Capital | xxx | xxx | xxx |
|  |  | xxx | xxx | xxx |  |  | xxx | xxx | xxx |
|  |  | xxx | xxx | xxx |  |  | xxx | xxx | xxx |
|  |  |  |  |  |  | By Balance b/d | xxx | xxx | xxx |

(a) Comparing the Capital balances:

$$
\begin{array}{lll}
\mathrm{X} & \mathrm{Y} & \mathrm{Z}
\end{array}
$$

Capital balances before adjustments (1) xxx $\mathrm{xxx} \quad \mathrm{xxx}$
(-) Less: Capital after adjustments
(2) xxx xxx xxx

XXXXXXXXX

Then pass the adjustment entries through Capital Accounts.

## Illustration 9

TheCapital accounts P,Q and R stood at Rs. 10,000, Rs. 7,500 and Rs. 5,000 respectively after the necessary adjustments in respect of the drawings and the net profit for the year ended $31^{\text {st }}$ December, 2008. It was subsequently ascertained that $5 \%$ interest on capital and on the drawings of each partner had been omitted. The drawings of the partners had been P Rs. 100 , Q - Rs. 750 and R-Rs. 600. The interest on theseamountedto Rs. 20 , Rs. 15 and Rs. 12 respectively. The profit for the year as already adjusted amounts to Rs.5,000. The partners share profits inproportion of $2 / 5^{\text {th }}, 2 / 5^{\text {th }}$ and $1 / 5^{\text {th }}$.

Give the adjusted capital accounts of the partners together with the Journalentries necessary for such adjustments.

## Solution

Calculation of Interest on Capital

| Particulars | $\begin{gathered} \mathbf{P} \\ (\mathbf{R s}) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{Q} \\ (\mathbf{R s}) \end{gathered}$ | $\begin{gathered} \mathbf{R} \\ (\mathbf{R s}) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Capital as on 31.12.2008 ( + ) | 10,000 | 7,500 | 5,000 |
| Add Drawings | 100 | 750 | 600 |
|  | 10,100 | 8,250 | 5,600 |
| (-) Less : Profits (5000 in 2:2:1 | 2,000 | 2,000 | 1,000 |
| Capital as on 1.1.2008 | 8,100 | 6,250 | 4,600 |
| Interest on capital @ 5\% | 405 | 312.50 | 230 |

Profit and Loss Adjustment Account

| Particulars | Rs. | Particulars | Rs. |
| :---: | ---: | :---: | ---: |
| To Interest on Capital |  | By Interest on drawings |  |
| P |  | P |  |
| Q | $\mathbf{4 0 5}$ | Q | $\mathbf{2 0}$ |
| R | $\mathbf{3 1 2}$ | R | $\mathbf{1 5}$ |
|  | $\mathbf{2 3 0}$ | By Capital A/c's (Rs.900 | $\mathbf{1 2}$ |
|  |  | in 2:2:1) | P |
|  |  | Q |  |
|  |  | R | $\mathbf{3 6 0}$ |
|  |  |  | $\mathbf{3 6 0}$ |
|  |  |  | $\mathbf{1 8 0}$ |
|  |  |  |  |
|  |  |  | $\mathbf{9 4 7}$ |
|  |  |  |  |

## Capital Accounts

| Particulars | $\begin{gathered} \hline \mathrm{P} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \hline \mathrm{Q} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \hline \mathrm{R} \\ \mathrm{Rs} . \end{gathered}$ | Particulars | $\begin{gathered} \hline \mathrm{P} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \hline \mathrm{Q} \\ \mathrm{Rs} . \end{gathered}$ | $\begin{gathered} \hline \mathrm{R} \\ \mathrm{Rs} . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Interest on drawings | 20 | 15 | 12 | By Balance b/d <br> By Interest on Capital | 10,000 | 7,500 | 5,000 |
| To Profit \& Loss Adj.A/c | 360 | 360 | 180 |  | 405 | 312 | 230 |
| To Balance c/d | 10,025 | 7,437 | 5,038 |  |  |  |  |
|  | 10,405 | 7,812 | 5,230 |  | 10,405 | 7,812 | 5,230 |
|  |  |  |  | To Balance b/d | 10,025 | 7,437 | 5,038 |


|  | $\mathbf{P}$ |  | $\mathbf{R}$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Capital balance before adjustments | 10,000 | 7,500 | 5,000 |  |
| (-) less : Capital balance after adjustments | 10,025 | 7,437 | 5,038 |  |
|  | -25 | 63 | -38 |  |

## The Journal Entry would be

|  | Debit | Credit |
| :--- | ---: | ---: |
| Q's Capital A/c Dr. | 63 |  |
| To P's Capital A/c |  | 25 |
| To R's Capital A/c |  | 38 |
| [Being adj. of interest on capital and interest |  |  |
| on drawings after closing of accounts] |  |  |

## Illustration 10

P,Q \& R are sharing profits and losses equally. They have capitals of Rs. 20,000, Rs. 15,000 and Rs. 10,000 respectively. For the year 1991, interest was credited to them @ $6 \%$ instead of 5\%

Give adjusting entry

## Solution

## Statement Showing Adjustment of Capital

| Particulars | $\begin{gathered} \mathrm{P} \\ \mathrm{Rs} . \end{gathered}$ | $\mathrm{Q}$ | $\begin{gathered} \mathrm{R} \\ \mathrm{R} \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| ```Interest on Capital @ 6\% P (Rs. \(20,000 \times 6 \%\) ) Q (Rs. \(15,000 \times 6 \%\) ) R (Rs. \(10,000 \times 6 \%\) ) (-) Less : Interest on Capital @ 5\%``` | $\begin{aligned} & 1,200 \\ & 1,000 \end{aligned}$ | $\begin{aligned} & 900 \\ & 750 \end{aligned}$ | 600 6 |
| Excess Interest allowed <br> (-) Adjustment of Rs. $450(200+150+100)$ Over credited profit due to decrease in Interest on capital to be shared equality. | $200$ $150$ | 150 $150$ | 100 150 |
|  | 50 | - | (-)50 |

So,
P's Capital A/c
Dr. 50

To R's Capital A/c 50
[Being excessive interest charged rectified]

## Guarantee



### 18.10 Guarantee of Profit by Partner to firm:

There may be situations where a partners may guarantee that he would being in the minimum amount of income specified by him as income to the firm. In case the income earned by the firm, is less than the amount guaranteed, the shortage of income would be transferred from his Capital Account/Current Account.

Dr.
xxx
To Prof it \& Loss Appropriation A/c
[Being shortage of minimum income

Guaranteed by the partner transferred
From his account]
In case more I come is generated than the guaranteed amount no adjustments is required.

## Guarantee of profit by a firm to its partners:

All the partners or a partner may guarantee any partner 'the minimum amount of profit', he would receive from the firm. Incase of shortage of profit' due to normal sharing of profit, then the following adjustments are required.


## Situation 1

Partners Normal Profits (Rs.)

A Rs.8,000
B Rs.6,000
C Rs.4,000
' C ' is Guaranteed a minimum profit of Rs. 5,000 by $\mathrm{A} \& \mathrm{~B}$.
So, the shortage of profit to C of Rs. 1,000 is to be borne by A and B in their profit sharing ratio.

|  | A | B | C |
| :---: | :---: | :---: | :---: |
| Normal profit <br> (-) Less : Minimum Profit shortage | Rs.8,000 | Rs.6,000 | $\begin{aligned} & \hline \text { Rs.4,000 } \\ & \text { Rs.5,000 } \end{aligned}$ |
|  |  |  | Rs.1,000 |
|  | 500 500 <br> [to be shared by A\&B]  |  |  |

## Situation 2

| Partners | X | Rs. 10,000 |
| :---: | :---: | :---: |
|  | Y | Rs. 5,000 |
|  | $Z$ | Rs. 3,000 |

' Y ' is guaranteed a minimum profit of Rs. 7,000 by X . So, the shortage of Rs. 2,000 for Y to be borne by ' X ' only.

X's Capital A/c Dr. 2,000
To Y's Capital A/c 2,000
[Being minimum guarantee profit]
by X to Y - shortage adjusted]

## Illustration 11

Tommy and Commy share profit and loss in the ratio of 3:2 and from $1^{\text {st }}$ Jan, 2009 they decided to admit Commy who is to have $1 / 10^{\text {th }}$ share in profit with a minimum guarantee of profit of Rs. 30,000 . Tommy and Commy agree to share the profits as before and sustain the excess $1 / 10^{\text {th }}$ profit to Commy, in the ratio of $4: 1$, prepare the necessary account if the net profit for the year was Rs. $2,00,000$.

## Profit and Loss Appropriation Account

## Dr.

Cr.

| Particulars | Rs. | Rs. | Particulars | Rs. | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Profit transferred to |  |  | By Net Profit |  | 2,00,000 |
| Commy (1) |  | 30,000 |  |  |  |
| Tommy (2) | 1,08,000 |  |  |  |  |
| (-)Less: Shortage borne | 8,000 | 1,00,000 |  |  |  |
| Commy (2) <br> (-)Less: Shortage borne | $\begin{array}{r} 72,000 \\ 2,000 \\ \hline \end{array}$ | 70,000 |  |  |  |
|  |  | 2,00,000 |  |  | 2,00,000 |

## Workings :

(1)Minimum Guaranteed profit to Commy
(-) Less : Normal Profit [1/10 ${ }^{\text {th }}$ of Rs.2, 00, 000]
Shortage of Profit

Rs.30, 000
Rs.20, 000
(2)Balance profit after minimum guarantee to Commy
$=$ Rs. $2,00,000-$ Rs. 20,000


Dommy (Rs.1, 80, $\left.000 \times \frac{2}{5}\right)=$ Rs. 72,000

## Partnership Accounts-II <br> Admission of Partners

### 19.1 Admission of a Partner

When a Partnership firm expands, additional capital, managerial expertise and special skill are required. In this case a firm decide to admit a new partner in order to fill this gap. A new partner can be admitted into the firm with the consent of the existing partners. The incoming partner has the right to share the profit and acquires the right to share the assets of the firm, since he has to contribute his capital. But the Indian Partnership Act does not makes it compulsory to bring in capital by the incoming partner. As a new partner is admitted into the firm, the relation of the existing partners changes. Therefore it becomes necessary for reconstitution of the existing firm. Whenever a new partner is admitted, or a partner retires or dies or partners become insolvent, the firm has to be reconstituted. This reconstitution of partnership mainly leads to the revision of profit sharing ratio of the existing partners. The new partner is not liable for any liabilities of the firm incurred before his admission.

Now it can be said that a new partner is admitted for additional capital or managerial skills or technical know-how in the process of expansion. Such admission reconstitutes the existing firm and he will not be liable for the liabilities before his admission, but the new partner is entitled to the share of profit or loss that arises from the date of his admission.

The following are procedures that are to be followed by a firm when a new partner is admitted:

1. Adjustment in profit sharing proportion
2. Adjustment for Goodwill
3. Adjustment for Revaluation of the assets and liabilities of the firm.
4. Adjustment relating to the accumulated profits $r$ losses and reserves.
5. Adjustment regarding the Capital

### 19.2 Accounting aspects

## 1. Calculation of new profit sharing ratio

As already stated, when a new partner is admitted into the firm, the profit sharing ratio is adjusted, since the new partner has to be given his share of profit, which will result in reducing the profit share of existing partners. This reduction is called as sacrifice by the old partners to admit a new person. Thus the profit sharing ratio changes when a new partner is admitted. This New Profit sharing has to be calculated in order to share to future profit or loss. In the absence of any terms in the agreement regarding the profit sharing ratio, it has to be divided equally. But when the agreement specifically mentions the sharing of Ratio, the new ratio has to be computed.

1. When the share of new partner is given, but the sacrificing propositions is not mentioned.
2. Assuming that the remaining profit to be shared by the old partners in the old ratio, where the profit is taken as Rs. 1

## Illustration 1

$A \& B$ are sharing profits in the ratio of $4: 2$. They admit $C$ into partnership for $1 / 3^{\text {rd }}$ share in future profit. Calculate the new profit sharing ratio.

## Solution:

$$
\begin{array}{ll}
\text { Old ratio } & =4: 3 \\
\text { Let the profit be } & =\text { Re. } 1 \\
\text { Remaining share } & =1-\frac{1}{3}=\frac{2}{3} \\
\text { A's new share } & =\frac{4}{7} \times \frac{2}{3}=\frac{8}{21} \\
\text { B's new share } & =\frac{3}{7} \times \frac{2}{3}=\frac{6}{21} \\
\text { C's new share } & =\frac{1}{3} \times \frac{7}{7}=\frac{7}{21}
\end{array}
$$

The new profit sharing ratio 8:6:7
2. When the share of new partner is given, the sacrifice is done $b$ one of the partners (One of the old partners from whom his proportion of profit in favour of the new partner)

## Illustration 2

$\mathrm{X} \& \mathrm{Y}$ are partners and their profit sharing ratio is $3: 2$. They admit Z into the firm with $1 / 6^{\text {th }}$ share in profit which is borne by X . Find out the new profit sharing ratio.

## Solution

Old ratio $=3: 2$
Z's share $=\frac{1}{6}$

Z's share of profit borne by X only

X's new share

$$
=\frac{3}{5}-\frac{1}{6}=\frac{18-5}{30}=\frac{13}{30}
$$

Y's new share (no change) $=\frac{2 \times 6}{5 \times 6}=\frac{12}{30}$

Z's new share

$$
=\frac{1 \times 5}{6 \times 5}=\frac{5}{30}
$$

New Profit sharing ratio $=13: 12: 5$

When the share of the new partner is given and sacrifice is done equally by the old partners in favour of the new partner.

## Illustration 3

$P \& Q$ are partners sharing Profit \& Loss in 3:2 ratio. $R$ is admitted with $1 / 6^{\text {th }}$ share in profit which $\mathrm{P} \& \mathrm{Q}$ sacrifice equally. Find out the new profit sharing ratio.

## Solution

Old ratio $=3: 2$

R's share $=\frac{1}{6}$
$P \& Q$ sacrifice equally i.e, $=\frac{1}{6} \times \frac{1}{2}=\frac{1}{12}$

P's new share

$$
=\frac{3}{5}-\frac{1}{12}=\frac{36-5}{60}=\frac{31}{60}
$$

Q's new share $\quad=\frac{2}{5}-\frac{1}{12}=\frac{24-5}{60}=\frac{19}{60}$

Z's share

$$
=\frac{1 \times 10}{6 \times 10}=\frac{10}{60}
$$

New Profit Sharing ratio $=31: 19: 10$

## Illustration 4

$A \& B$ are partners sharing profit in $3: 1$ ratio. C is admitted into partnership with $1 / 8^{\text {th }}$ share. C acquires this share by way of $1 / 32$ from A and $3 / 32$ from B. Find the new Profit sharing ratio.

## Solution

Old ratio $=3: 1$
C's share in $\frac{1}{8}$ th share

A's new share $=\frac{3}{4}-\frac{1}{32}=\frac{24-1}{32}=\frac{23}{32}$

B's new share $=\frac{1}{4}-\frac{3}{32}=\frac{8-3}{32}=\frac{5}{32}$
C's share $=\frac{1}{8} \times \frac{4}{4}=\frac{4}{32}$

New Profit Sharing ratio $=23: 5: 4$

## Illustration 5

$\mathrm{X} \& \mathrm{Y}$ are partners sharing their ratio at 3:2. Z is admitted. X surrenders $1 / 5^{\text {th }}$ share of his profit and $2 / 5^{\text {th }}$ is by Y in favour of Z . Calculate the new profit sharing ratio.

## Solution

Old ratio $=3: 2$
A's new share
Surrender in C's favour $=\frac{3}{5} \times \frac{1}{5}=\frac{3}{25}$

$$
\frac{3}{5}-\frac{3}{25}=\frac{15-3}{25}=\frac{12}{25}
$$

B's new share
Surrender in C's favour $=\frac{2}{5} \times \frac{2}{5}=\frac{4}{25}$

$$
\frac{2}{5}-\frac{4}{25}=\frac{10-4}{25}=\frac{6}{25}
$$

C's new share
Share surrender by $\mathrm{A}+\mathrm{B}$

$$
\frac{3}{25}+\frac{4}{25}=\frac{7}{25}
$$

New Profit sharing ratio $=12: 6: 7$

## Calculation of sacrificing ratio

When a new partner is admitted, the old partners surrender a part of their old share to the new partner. This surrender in the forms of proportion is sacrificing ratio. It is the ratio which the old partners sacrifice from their old share to the new incoming partner. This ratio is arrived at to calculate the amount of compensation payable to the old partners by the new
partner, who have sacrificed their properties to admit the new partner. Sacrificing ratio is the difference between old ratio and new ratio.

## Sacrificing ratio $=$ Old Ratio $\boldsymbol{-}$ New Ratio

Sacrificing ratio is normally used to share the Goodwill brought in by the new partner.

## Illustration 6

$R$ and $S$ are partners, sharing profits in the ratio of 3:2. A new partner $Q$ is admitted for $1 / 7$ of the profit. Compute the New ratio and sacrificing ratio.

## Solution

Old ratio $=3: 2$
Q's share $=\frac{1}{7}$
Let the profit be $=1$
Remaining share $=1-\frac{1}{7}=\frac{6}{7}$

R's new share $=\frac{3}{5} \times \frac{6}{7}=\frac{18}{35}$

S's new share $=\frac{2}{5} \times \frac{6}{7}=\frac{12}{35}$

Q's new share $=\frac{1}{7} \times \frac{5}{5}=\frac{5}{35}$

New Profit sharing ratio $=18: 12: 5$

Sacrificing ratio $=$ Old ratio - New Ratio

R's sacrificing ratio $=\frac{3}{5}-\frac{18}{35}=\frac{21-18}{35}=\frac{3}{35}$

S's Sacrificing ratio $=\frac{2}{5}-\frac{12}{35}=\frac{14-12}{35}=\frac{2}{35}$

Sacrificing ratio $=3: 2$
Note: Since the proportion of sacrifice is not given, the sacrifice ratio will be equal to old ratio.

## Illustration 7

$A$ and $B$ are partners, sharing profits in the ratio of $3: 2$. $C$ is admitted as a partner, the new profit sharing ratio among $A, B$ and $C$ is 5:3:2. Find out the sacrificing ratio.

## Solution

Sacrificing Ratio = Old ratio - New Ratio
$A=\frac{3}{5}-\frac{5}{10}=\frac{1}{10}$
$\mathrm{B}=\frac{2}{5}-\frac{3}{10}=\frac{1}{10}$

Sacrificing Ratio $=1: 1$

## 2. Calculation of Goodwill or adjustment for Goodwill

Goodwill - Goodwill is an intangible asset with some commercial value. Goodwill is the reputation gained by the business over the year. Goodwill arises when a business enjoys more customers than that of the other businesses of same nature. The differential value may arise due to special location, technical efficiency, better quality products, better services, trademark etc. The Goodwill is an intangible asset, which is the most intangible of the all the intangible assets. Goodwill is the present value of a firm's anticipated excess earnings.

## Definition:

According to Spicer and Pegler. "Goodwill may said to be that element arising from the reputation, connection or other advantages possessed by a business which enables it to earn greater profits than the return normally to be expected on the capital represented by the net tangible assets employed in the business".

According to Lord Elton - "Goodwill is nothing more than the probability that the old customers will resort to the old place".

According to Kohler - "Goodwill is the current value of expected future income in excess of a normal return on the investment in net tangible assets: not a recorded or reported amount unless paid for".

Goodwill therefore is an intangible asset which cannot be seen or touched; however is not a fictitious asset. Goodwill cannot be sold separately unlike other fixed assets. Goodwill can be sold only when a business is sold. The Goodwill value is also subject to fluctuation.

## Need for goodwill valuation

Goodwill is valued in a sole trading organization, when it is to be sold; but in the case of a partnership firm, goodwill is valued to determine the compensation to be paid by the new partner to the old partners. Since there is no risk of future losses, as the old partners have put in their efforts to establish the firm, taking a risk at the initial stage, attracting customers and
earning more profits. In partnership there are some other situations where goodwill is valued. They are:
(1) When a new partner is admitted.
(2) When a partner retires from the firm.
(3) When a new partner dies.
(4) When there is a change in the profit sharing ratio.
(5) When the firm is dissolved.

Methods of valuing goodwill or calculation of goodwill
Goodwill is mainly valued under three methods.
(1) Average profit method
(2) Super profit method.
(3) Capitalisation method.

1. Average profit method - Under average profit method goodwill is computed based on the purchase of certain number of year's profit on the average profit of the number of past years.

Goodwill $=$ Average Profit $\times$ No. Of year of purchase
Average Profit $=\frac{\text { Total Profits }}{\text { No.of Years }}$

This method assumes that the future is estimated on the performance of the past.

## Illustration 8

From the following compute the amount of goodwill of the firm, based on the "three year's purchase" of last four year's average profit Profit during the last four years:
Rs.

I Year
10,000
II Year
15,000
III Year
12,000
IV Year
18,000

## Solution

Calculation of Goodwill under Average Profit Method
Calculation of Average Profit

|  | Rs. |
| :--- | :---: |
| I Year | 10,000 |
| II Year | 15,000 |
| III Year | 12,000 |
| IV Year | 18,000 |
| Total Profit |  |
|  | ------- |
| Average Profit $=\frac{\text { Total profit }}{\text { No.of Years }}$ |  |

$$
=\frac{55000}{4}
$$

```
Goodwill \(=\) Average Profit \(\times\) No. of years of Purchase
\(=13750 \times 3\)
```


## Goodwill = Rs. 41250

2. Super Profit method - Under Supper Profit method, the goodwill is valued on the firm's anticipated excess profit. Super profit is nothing but the excess earning over the normal earning i.e., excess of average profit over normal profit (normal profit based on normal rate of return of that industry). Super profit with the number of years of purchase gives the amount of goodwill under this method.

Good will $=$ Super profit $\times$ No. of years of Purchase
Super Profit = Average Profit - Normal Profit
Normal Profit $=$ Capital employed $\times$ Normal rate of return

## Illustration 9

Calculate the goodwill under super profit method profit for the past 3 years as follows:
Rs.

2002
25,000
2003
40,000
2004
55,000
The capital invested by the firm is Rs. 2,50,000. A normal rate of return on capital is at $10 \%$. Goodwill is based on 3 years of purchase.

## Solution

Calculation of goodwill under super profit method Average Profit:

| 2002 |  | Rs. |
| :--- | :---: | :---: |
| 2003 | - | 25,000 |
| 2004 | - | 40,000 |
| Total Profit |  | 55,000 |
| Average Profit | $=\frac{\text { Total Profits }}{\text { No.of Years }}$ | $1,20,000$ |
|  |  |  |
|  | $=\frac{120000}{3}=$ Rs. 40,000 |  |

Normal Profit $=$ Capital employed $\times$ Normal Rate of Return

$$
=2,50,000 \times 10 \%
$$

= Rs. 25000
Super Profit = Average Profit - Normal Profit
$=40,000-25,000$
= Rs. 15,000
Goodwill $=$ Super Profit $\times$ No. of years of Purchase
$=15,000 \times 3$
= Rs. 45,000
3. Capitalization Method - This method of goodwill calculation is used when the actual profit of the firm is less than the normal profit. Capitalization can be made on average profit as well as on super Profit.

When the average profit is capitalized on the basis of normal rate of return, the amount of goodwill will be the excess of capitalized amount over the net assets of the firm. The same is done under when Super Profit is capitalized but this is on Super Profit.

Goodwill $=$ Capitalised Value of Profit - Net tangible asset
Capitalized Value of Profit $=\frac{\text { Average Profit }}{\text { Normal rate of return }}$
(on Average Profit)
(on Super Profit) $=\frac{\text { Super Profit }}{\text { Normal rate of return }}$
Net tangible assets $\boldsymbol{=}$ Total assets $\boldsymbol{-}$ Outsider's liabilities

## Illustration 10

Compute the goodwill under capitalization method on average profit and on super profit. Average Profit of the firm is Rs. 20,000, the firm's capital is Rs. $1,50,000$ and the normal rate in the industry is $10 \%$. The tangible assets are Rs. 40,000 .

## Solution

Calculation of goodwill under capitalization method on average profit.
Goodwill $=$ Capitalized Value of Average Profit - Net tangible asset
Capitalized Value of Profit $=\frac{\text { Average Profit }}{\text { Normal rate of return }}$
$=\frac{20,000}{10 \%}$

$$
\begin{aligned}
& \text { = Rs. 2,00,000 } \\
& \begin{aligned}
\text { Goodwill } & =2,00,000-40,000 \\
& =\text { Rs. } \mathbf{1 , 6 0 , 0 0 0}
\end{aligned}
\end{aligned}
$$

On Super Profit
Super Profit $=$ Average Profit - Normal Profit

$$
=20,000-(1,50,000 \times 10 \%)
$$

Super Profit $=$ Rs. 5,000
Capitalised Value Profit $=\frac{\text { Super Profit }}{\text { Normal rate of return }}$

$$
=\frac{5,000}{10 \%}=\text { Rs. } 50,000
$$

$$
\begin{array}{ll}
\text { Goodwill } & =\text { Capitalized Value of Average Profit }- \text { Net tangible asset } \\
& =50,000-40,000 \\
\text { Goodwill } & =\text { Rs. } \mathbf{1 0 , 0 0 0}
\end{array}
$$

### 19.4 Revaluation of Assets and Liabilities

When a new partner is admitted, the assets and liabilities are subjected to be revalued, since there may be profit or loss on revalued, of assets and liabilities which has to be shared by the old partners. This is done to avoid any undue gain or loss to the newly admitted partner. The asset and liabilities would have been valued when the accounts were closed and appears in the last Balance Sheet. After the last balance sheet dare, the assets and liabilities may be increased or decreased or new assets may be incorporated or eliminated, the same in the case of liabilities on the date of admitting a new partner. The assets and liabilities on the date of last balance sheet is compared with that of assets and liabilities valued on the date of admitting a new partner. The difference or the change in value are recorded in an Account called as Revaluation A/c or Profit or loss adjustment Account. The balance of Revaluation Account may be either profit or loss on revaluation of the assets and liabilities which is transferred to the old partner's capital $\mathrm{A} / \mathrm{c}$ in their old profit sharing ratio.

The revaluation of assets and liabilities are done in two forms:

1. When the assets and liabilities are revalued, the new revised values are shown in the books.
2. When the assets and liabilities are revalued, the new revised values are not shown in the books.

## 1.When revised values are shown in the books of accounts:

When a new partner is admitted into the firm, the assets and liabilities are subjected to revaluation. Such adjustment results either in increase or decrease in the book value of assets and liabilities, which are brought into the Revaluation Account and the profit or loss that arise in this account is transferred to the old partner's Capital Account. This new revalued value of assets and liabilities are shown in the balance sheet at their new value as on the date on which the new partner is admitted.

## Journal Entries

1. When there is any increase in asset value.
Asset A/c
Dr. xxx
To Revaluation $\mathrm{A} / \mathrm{c}$
xxx
2. When there is any decrease in asset value.
Revaluation A/c
Dr.
xxx
To Assets A/c
xxx
3. When there is any increase in liabilities

Revaluation A/c Dr. xxx
To Liabilities A/c xxx
4. When there is any decrease in liabilities

Liabilities A/c Dr. xxx
To Revaluation A/c xxx
5. When there is Profit on Revaluation

Revaluation A/c Dr. xxx
To Old Partner's Capital A/c xxx
6. When there is loss on Revaluation Old Partner's Capital A/c Dr. xxx

To Revaluation A/c xxx

| The Profit items in <br> Revaluation $\mathbf{A} / \mathbf{c}$ are: | The loss items in <br> Revaluation A/c are: |
| :--- | :--- |
| When assets value increases | When assets value decreases |
| When liabilities decreases | When liabilities value decreases |
| When new unrecorded assets | When new unrecorded liabilities <br> are available |

## 2. When the revised values are not shown in the books of accounts:

At the time of admitting a new partner, certainly the assets and liabilities are to be valued and the same will be shown in the new balance sheet, but the partners(including the new partner) may decide that the revalued assets and liabilities are not to be shown in the new firm's books. Under such circumstances, the entries are to be passed into revaluation as in the first part and entries in revaluation are reversed in another part of revaluation $\mathrm{A} / \mathrm{c}$. All the items debited in revaluation $\mathrm{A} / \mathrm{c}$ re credited in the other part; likewise all the credit items are debited in the other part of revaluation $\mathrm{A} / \mathrm{c}$. The first part is same as when the revalued values are shown in the balance sheet; but the second part's profit or loss are shared by all the partner's including the new partner in their new profit sharing ratio. This two parts of revaluation account put together is called Memorandum Revaluation Account. Such reversal entries in the second part of the revaluation Account, gives a nullified effect and making the result of asset and liabilities not to be the new revalued value.

## Note for Memorandum Revaluation Account:

1. The first part of revaluation Account has all the profit items in the credit side and loss items in the debit side, the profit or loss is transferred to old partners in their old ratio.
2. The second part of revaluation Account has all the profit items in the debit side and loss items in the credit side, the profit or loss is transferred to all the partners(including the new partner) in the new profit sharing ratio.
3. In the new Balance Sheet, all the assets and liabilities appear at their original values.

## Specimen of Revaluation Account

Revaluation Account

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| To increase in value of Liabilities | xxx | By Decrease in value of Liabilities | xxx |
| To Decrease in value of Assets | xxx | By Increase in value of Assets | xxx |
| To Unrecorded Liabilities |  | By Unrecorded assets <br> By Loss (transferred to old Partners capital A/c in old Ratio) |  |
| To Profit (transferred to old partners capital $\mathrm{A} / \mathrm{c}$ in old ratio) | xxx |  | xxx |
|  |  |  |  |

Note: For Memorandum revaluation Account, all the debit items in revaluation A/c are transferred to the credit side and all the credit items in the revaluation $\mathrm{A} / \mathrm{c}$ are transferred to the debit side. In the second part, the profit or loss in the second part is transferred to all the partner's capital $\mathrm{A} / \mathrm{c}$ in their new profit sharing ratio.

Revalued value of assets and liabilities are not shown in the books of Accounts.

## Illustration 16

The following is the balance sheet of X \& Y. Sharing profits is in the rato of 3:2 as on 31.12.2006.

| Liabilities | Rs. | Assets | Rs. |
| :---: | :---: | :---: | :---: |
| Creditors | 10,000 | Cash | 1,500 |
| Capital |  | Debtors | 6,500 |
| X | 40,000 | Stock | 18,000 |
| Y | 30,000 | Building | 34,000 |
|  |  | Furniture | 20,000 |
|  | 80,000 |  | 80,000 |

They agreed to admit Z into partnership with a capital of Rs.25,000. The new profit sharing ratio is 5:3:2. The following revaluation was made.
(i) Stock to be depreciated at $10 \%$
(ii) Provision for Bad debts is to be Rs. 500
(iii) Furniture to be depreciated at 5\%
(iv) Buildings is valued at Rs. 40,000

Pass journal entries and prepare Revaluation account and Balance Sheet after admission of Z .

## Solution

## Journal Entries

| Particulars | $\begin{gathered} \text { Debit } \\ \text { Rs. } \end{gathered}$ | Credit Rs. |
| :---: | :---: | :---: |
| Revaluation A/c Dr. <br> To Stock A/c  <br> To Provision for Bad debts A/c  <br> To Furniture A/c  <br> [Being the value of assets decreased]  | 3,300 | $\begin{array}{r} 1,800 \\ 500 \\ 1,000 \end{array}$ |
| Buildings A/c Dr. To Revaluation A/c (Being the value of Building value increased) | 6,000 | 6,000 |
| Revaluation A/c Dr. To X's Capital A/c To Y's Capital A/c (being profit on revaluation transferred to X and Y's Capital in 3.2 ratio) | 2,700 | $\begin{array}{r} 1,620 \\ 1000 \end{array}$ |

Dr.
Revaluation Account
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Stock | 1,800 | By Builiding | 6,000 |
| To Provision for Bad debts | 500 |  |  |
| To Furniture | 1,000 |  | 6,000 |
| To X's Capital 1620 | 6,000 |  |  |
| To Y's Capital 1080 |  |  |  |

Dr.

## Capital AccountCr.

| Particulars | X | Y | Z | Particulars | X | Y | Z |
| :--- | :---: | :---: | :---: | :--- | ---: | ---: | ---: |
| By Balance b/d |  |  |  | By Balance b/d <br> By Revaluation(Profit) | 40000 | 30000 | - |
|  | 41620 | 31080 | 25000 | 1080 | - |  |  |
|  | 41620 | 31080 | 25000 |  | - | - | 25000 |
|  | 41620 |  | 41620 | 31080 | 25000 |  |  |

Balance Sheet as on 31.12.2006
(After Admission of Z)

| Liabilities | Rs. | Assets |  | Rs. |
| :---: | :---: | :---: | :---: | :---: |
| Creditors X's Capital A/c Y's Capital A/c Z's Capital A/c | $\begin{aligned} & 10000 \\ & 41620 \\ & 31080 \\ & 25000 \end{aligned}$ | $\begin{aligned} & \text { Cash } \\ & (+) \text { Z's Capital } \end{aligned}$ | 1500 |  |
|  |  |  | 25000 |  |
|  |  |  |  | 26500 |
|  |  | By Debtors <br> (-) Provision | $\begin{aligned} & 6500 \\ & 500 \end{aligned}$ |  |
|  |  |  |  | 6000 |
|  |  | Stock <br> (-) Depreciation | $\begin{aligned} & 18000 \\ & 1800 \end{aligned}$ |  |
|  |  |  |  | 16200 |
|  |  | Building <br> (+) Appreciation | $\begin{aligned} & 34000 \\ & 6000 \\ & \hline \end{aligned}$ |  |
|  |  |  |  | 40000 |
|  |  | Furniture <br> (-) Depreciation | $\begin{aligned} & 20000 \\ & 1000 \\ & \hline \end{aligned}$ |  |
|  |  |  |  | 19000 |
|  | 107700 |  |  | 107700 |

## Illustration 17

Ravi and Suresh are partners in 2:1 ratio. Ramesh was admitted as a new partners with Rs. 80,000 as capital. The new partner agreed to have their new profit sharing ratio at 2:3:2

The balance sheet of Ravi and Suresh on 31.12.2007 was:

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Creditors | 60000 | Cash | 5000 |
| Capital |  | Stock | 30000 |
|  | Ravi | 80000 | Debtors |
|  | Suresh | 50000 | Machinery |
|  |  | Building | 55000 |
|  | 190000 |  | 80000 |
|  |  |  | 190000 |

The following revaluation is made
(i) Building values at Rs. 1,00,000
(ii) Provision for doubtful debts @ $5 \%$ on debtors
(iii) Stock and machinery are to be depreciated @ 5\%

It has been agreed among the partners that assets and Liabilities are to be shown at their old values.
Prepare Memorandum Revaluation Account and new Balance Sheet after Ramesh's admission.

## Solution:

## Memorandum Revaluation Account

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| To Provision for doubtful debts | 1000 | By Building | 20000 |
| To Stock | 1500 |  |  |
| To Machinery | 2750 |  |  |
| To Ravi's Capital 9833 |  |  |  |
| To Suresh's Capital 4917 | 14750 |  |  |
|  | 20000 |  | 20000 |
| To Building | 20000 | By Provision for doubtful debts <br> By Stock <br> By Machinery <br> By Ravi's Capital 3688 <br> By Suresh's Capital 5531 <br> By Ramesh's Capital 5531 | 1000 |
|  |  |  | 1500 |
|  |  |  | 2750 |
|  |  |  |  |
|  |  |  |  |
|  |  |  | 14750 |
|  | 20000 |  | 20000 |

Dr.
Capital Account
Cr.

| Particulars | Ravi | Suresh | Ramesh | Particulars | Ravi | Suresh | Ramesh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Revaluation (Loss) | 3688 | 5531 | 5531 | By Balance c/d | 80000 | 50000 | - |
| To Balance c/d | 86145 | 49386 | 74469 | By Revaluation (profit) | 9833 | 4917 | - |
|  |  |  |  | By Cash | - | - | 80000 |
|  | 89833 | 54917 | 80000 |  | 89833 | 54917 | 80000 |

Balance Sheet as on 31.12.2007

| Liabilities | Rs. | Assets |  | Rs. |
| :--- | :--- | :--- | :--- | :--- |
| Creditors | 60000 | Cash | 5000 |  |
| Ravi’s Capital | 86145 | (+) Ramesh Capital | 80000 | 85000 |
| Suresh Capital | 49386 |  |  |  |
| Ramesh Capital | 74469 | Stock |  | 30000 |
|  |  | Debtors | Machinery |  |
|  |  | Building | 55000 |  |
|  |  |  |  | 80000 |
|  |  | 270000 |  | 270000 |

## Illustration 21

$X$ and $Y$ are partners sharing profit in the ratio of $3: 1$. Their Balance Sheet as on $31^{\text {st }}$ Dec 2000 is as under:

| Particulars |  | Rs. | Particulars |
| :--- | :--- | :--- | :--- |
| Capital X | 30000 | Cash | Rs. |
| General Reserve |  |  | 16000 |
| Sundry Creditors | Bills Receivable | 22500 |  |
|  | 4000 | Stock | 3000 |
|  | 37500 | Debtors | 20000 |
|  |  | Furniture | 16000 |
|  |  | Building | 1000 |
|  | 87500 |  | 25000 |
|  |  |  | 87500 |

On 1.1.2001 they admit Z into their firm as new partner on the following arrangements.
(i) Z to bring Rs. 10000 as capital for $1 / 5$ share of profit.
(ii) The new firm to have goodwill of Rs. 10,000
(iii) Stock and Furniture to be reduced by $10 \%$ and a reserve of $5 \%$ on debtors for doubtful debts to be created.
(iv) Buildings to be appreciated at 20\%

Give the necessary ledger accounts and Balance sheet.

## Solution:

Dr.
Revaluation Account Cr.

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| To Stock | 2000 | By Buildings | 5000 |
| To Furniture | 100 |  |  |
| To Reserve for doubtful Debts | 800 |  |  |
| To X's Capital A/c 1575 |  |  |  |
| Y's Capital A/c 525 (Profit in 3:1) | 2100 |  |  |
|  | 5000 |  | 5000 |
| Dr. | Capita | Account | Cr. |


| Particulars | X | Y | Z | Particulars | X | Y | Z |
| :--- | :---: | :---: | :---: | :--- | :---: | :---: | :---: |
| To X's Capital |  |  | 1500 | By Balance b/d | 30000 | 16000 | - |
| To Y's Capital |  |  | 500 | By General Reserve | 3000 | 1000 | - |
| (Goodwill) |  |  |  | By Revaluation (Profit) | 1575 | 525 | - |
|  |  |  |  | By Z's Capital(Goodwill) | 1500 | 500 | - |
| To Balance c/d | 36075 | 18025 | 8000 | By Cash | - | - | 10000 |
|  | 36075 | 18025 | 10000 |  | 36075 | 18025 | 10000 |

Note: Goodwill account should not be raised in the books, when no consideration is paid for it. The new partner Z's share of Goodwill (Rs. $10,000 \times 1 / 5$ ) - Rs, 2,000 is adjusted as below:
Z's Capital A/c
Dr. 2,000

To X's Capital A/c
To Y's Capital A/c 500
(Being the new partner's share of
Goodwill adjusted to the old
Partners in sacrificing ratio - 3:1)

Balance Sheet of $\mathbf{X}, \mathbf{Y} \& \mathbf{Z}$ as on 1.1.2001

| Liabilities |  | Rs. | Assets | Rs. |  |
| :--- | :--- | ---: | :--- | ---: | ---: |
| Capital |  | 36075 | Cash | $(+$ R's Capital | 10000 |
|  | X | 18025 |  | 32500 |  |
|  | Z | 8000 | Bills Receivable |  |  |
| Creditors |  | 37500 | Stock(20000-2000) | 3000 |  |
|  |  | Debtors(16000-800) | 18000 |  |  |
|  |  | Furniture $(1000-100)$ | 15200 |  |  |
|  |  | Building(25000 + 5000) | 900 |  |  |
|  | 99600 |  | 30000 |  |  |

## Illustration 22

Arun and Babu are partners, sharing profits and losses equally. The Balance sheet as on 31.12.2008 was as under:

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Arun's Capital | 40000 | Buildings | 50000 |
| Babu's Capital | 40000 | Furniture | 20000 |
| General Reserve | 20000 | Stock | 10000 |
| Creditors | 30000 | Debtors | 25000 |
|  |  | Cash | 25000 |
|  | 130000 |  | 130000 |

On 1.1.2009 Charu was admitted as a partner with $1 / 5^{\text {th }}$ share of profit
(i) Building was valued at Rs. 70000
(ii) Furniture and stock were reduced by $10 \%$
(iii) Charu was to bring in Rs. 30000 as capital and Rs. 8000 as goodwill in cash.
(iv) Provision for bad debts to be provided @ 5\%

Prepare necessary Ledger Accounts and Balance Sheet of the new firm.

## Solution

Dr.
Revaluation Account
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Furniture | 2000 | By Building | 20000 |
| To Stock | 1000 |  |  |
| To Provision for <br> Bad debts | 1250 |  |  |
| To Arun's Capital  <br> To Babu's Capital <br> (profit equally) 7875 |  |  |  |
|  |  | 15750 |  |
|  | 20000 |  | 20000 |

Dr.

| Particulars | Arun | Babu | Charu | Particulars | Arun | Babu | Charu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Balance c/d |  |  |  | By Balance c/d | 40000 | 40000 | - |
|  |  |  |  | By General Reserve | 10000 | 10000 | - |
|  |  |  |  | By Prem. For Goodwill | 4000 | 4000 | - |
|  |  |  |  | By Revaluation (profit) | 7875 | 7875 | - |
|  | 61875 | 61875 | 30000 | By Cash | - | - | 30000 |
|  | 61875 | 61875 | 30000 |  | 61875 | 61875 | 30000 |

Journal Entries

1. Cash $\mathrm{A} / \mathrm{c}$

To Charu's Capital A/c
(Being Charu brought in his capital)
2. Cash $\mathrm{A} / \mathrm{c}$

Dr
To Premium for Goodwill A/c
(Being Charu brought in Rs. 8000 as Goodwill)
3. Premium for Goodwill $\mathrm{A} / \mathrm{c} \mathrm{Dr}$

To Arun's Capital A/c
8,000

To Babu's Capital A/c
(Being Goodwill brought in by the new partner is
Shared by old partners in sacrificing ratio)

Balance Sheet as on 1.1.2009
(of the new firm)

| Liabilities |  | Rs. | Assets |  | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital | Arun Babu Charu |  | Building(50000+20000) |  | 70000 |
|  |  | 61875 | Furniture(20000-2000) |  | 18000 |
|  |  | 61875 | Stock(10000-1000) |  | 9000 |
|  |  | 30000 | Cash | 25000 |  |
| Creditors |  | 30000 | (+)Charu's Capital \& Goodwill | 38000 | 63000 |
|  |  |  | Debtors(25000-1250) |  | 23750 |
|  |  | 183750 |  |  | 183750 |

# Partnership Accounts - III <br> Retirement and Death of a Partner 

### 20.1 Retirement of a partner

A partner can retire from the firm. Indian Partnership Act 1932, states that a partner may retire from a firm with the consent of all the other partners in accordance with the expressed agreement by the partners of by giving notice in writing to all the other partners expressing his/her intention to retire. When a partner retire from the firm, his/her intention to retire. When a partner retire from the firm, he/she is called as the "retiring partner" or "outgoing partner". The retirement may be due to old age, disagreement with the other partners, better opportunity, ill-health etc.

However on retirement of a partner, the other partners or the remaining partners can continue the business, but the old partnership comes to an end, due to the retirement of a partner. A new partnership between the remaining partners is formed. This partnership is said to have dissolved the and a new or reconstituted partnership is formed. The retiring partner has to give a public notice that he has retired from the particular firm and that he will not be held accountable for the debts incurred by the firm after his retirement. A sleeping partner need not give any such notice.

## Illustration 10

Raja and /Rani are partners in a firm sharing profits and losses in the ratio 3:2. The balance sheet on 31.12.2008 was as follows:

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Capital Account | 60000 | Machinery | Furniture |

Rani retires from the firm on 1.1.2010 \& Raja is to run the business on the following revaluation
(i) Depreciate Furniture at 5\%
(ii) Depreciate Stock by $10 \%$
(iii) Provision for Bad debts on Debtors at 5\%
(iv) Rani is to be paid in cash on the date.

Prepare Revaluation A/c, Capital A/c and Balance Sheet

## Solution

| Dr. | Revaluation Account | Cr. |  |
| :--- | ---: | ---: | ---: | ---: |
| Particulars | Rs. | Particulars | Rs. |
| To Furniture(5\%@Rs.20,000) | 1000 | By Revaluation Loss: |  |
| To Stock(10\%@Rs 25,000) | 2500 | Raja 3600 |  |
| To Provision on Debtors | 2500 | Rani 2400 | 6000 |
| $(5 \% @$ Rs.50,000) | 6000 | $(3: 2)$ | 6000 |

Dr.

| Carticulars | Raja | Rani | Particulars | Raja | Rani |
| :--- | :---: | :---: | :--- | :---: | :---: |
| To Revaluation (loss) A/c | 3600 | 2400 | By Balance c/d | 60000 | 40000 |
| To Cash A/c (?) | - | 57600 | By General reserve | 30000 | 20000 |
| To Balance c/d | 86400 | - | $(3: 2)$ |  |  |
|  | 90000 | 60000 |  | 90000 | 60000 |

Balance Sheet of Rajas as on 1.1.2010
$\left.\begin{array}{|l|r|l|r|}\hline \text { Liabilities } & \text { Rs. } & \text { Assets } & \text { Rs. } \\ \hline \text { Capital A/c } & & \text { Machinery } & 25000 \\ \text { Raja } & 86400 & \text { Furniture (20000-1000) } & 19000 \\ \text { Creditors } & 30000 & \text { Stock (25000-2500) } & 22500 \\ & & \text { Debters } & 47500 \\ & & \text { Cash } & \\ & \text { (-)Rani's Capital } & 60000 & 67600\end{array}\right] 24009$.

## Illustration 11

Ram and Shyam are partners sharing profits and losses in the ratio of 3:2. Their Balance sheet is as follows:

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Capital Accounts: | 30000 | Machinery | Stock |

Shyam retires and the following revaluation are made:
(i) Depreciate Machinery by $7.5 \%$ and stock by $15 \%$
(ii) A Bad debts provision is raised against debtors at 5\% and a discount reserve against creditors at $2 \%$
(iii) The goodwill of the firm is valued at Rs. 37500

Prepare Revaluation A/c, Partner's Capital A/c and Balance sheet after Shyam's retirement.

## Solution

| Dr. Revaluation Account |  |  | Cr. |
| :---: | :---: | :---: | :---: |
| Particulars | Rs. | Particulars | Rs. |
| To Machinery (7.5\% @ Rs.30,000) | 2250 | By Reserve for creditors (2\% @ Rs. 11,250) | 225 |
| To Stock (15\% @ Rs.24000) | 3600 | By Revaluation Loss: |  |
| To Provision for Bad debts | 1125 | Ram 4050 |  |
| (5\% @ Rs.22,500) |  | Shyam 2700 | 6750 |
|  | 6975 |  | 6975 |

## Journal Entry (adjustment for Goodwill)

For Goodwill adjusted only to the extent of the retring partner's share
Ram's Capital A/c
Dr.
15,000

To Shyam's Capital A/c 15,000


Balance of Ram as on (after Shyam's retirement).

| Liabilities | Rs. | Assets |  | Rs. |
| :---: | :---: | :---: | :---: | :---: |
| Capital Account Ram | 24,450 | Machinery 30,000 |  | 27,750 |
|  |  | (-)Deperclation | 2,250 |  |
| Shyam's Loan A/c <br> Sundry Creditors 11250 <br> (-)Reserves@2\% 225 | 43,800 |  |  |  |
|  |  | Stock | 24,000 | 20,400 |
|  | 11,025 | (-)Depreciation | 3,600 |  |
|  |  | Debtors | 22,500 |  |
|  |  | (-) Provision | 1,125 | 21,375 |
|  |  | Bank |  | 9,000 |
|  |  | Cash |  | 750 |
|  | 79,275 |  |  | 79,275 |

### 20.4 Death of a Partner

Death of a partner dissolves the partnership but the surviving partners usually carry on the business by purchasing the deceased partner's share. Under these circumstance, similar situation arises as at the time of retirement of a partner, but the difference is retirement may be planned one, death is apermanent retirement. Generally the date of retirement coincides
with the last date of accounting year, but death may occur during any day of the accounting year.

In short, in case of a retirement of a partner, his share to transferred to this loan account (if not paid in cash immediately) after his retirement. But in case of a death of a partner, the deceased partner's share including a share of profit and goodwill is transferred to his executor's account.

## Joint Life Policy

In the event of death of a partner, the partnership firm will have to pay a heavy sum of money to his/her legal representative. The firm may not have adequate working capital and hence it unable to pay the representative of the deceased partner. To overcome this situation, the partners would take out a "joint life policy" on the lives of all the partner. Every year premium is payable and in case of death of the partner(s), the Insurance company would pay the sum insured. This would help the firm to pay the representative of the deceased partner. It should be noted that the "amount of Insurance" received is an asset and any profit or loss on such assets should be shared by all the partners including the deceased partner is their profit sharing ratio.

## Accounting Treatment of Joint Life Policy

The firm pays Joint Life Policy premium in the name of partners when a partner dies, the firm gets the policy amount from the insurance company and the same has to be paid to the representatives of the deceased partner, this has to be treated by the firm in their books. There are three methods of accounting treatment of Joint Life Policy.

## Accounting Treatment of

## Joint Life policy



## Method 1

Premium paid is treated As an 'expense'
[Joint Life policy Account is not maintained]

Method 2
Premium paid is treated as an asset

Method 3
When Premium paid is treated as an asset and reserve is maintained
[Joint Life policy is treated is maintained at its surrender value]

## Solution

## Method 1

In this case the premium is charged to profit \& loss account every year. However, in 2009, the Joint Life Policy would appear as follows:

Joint Life Policy
Dr.
Cr.

| Date | Particulars | Rs. | Date | Particulars | Rs. |
| :---: | :--- | :---: | :---: | :--- | :---: |
| 2009 |  |  | 2009 |  |  |
| Apr 15 | To Partner's Capital A/c |  | Apr 15 | ByBank A/c <br> (Money received) | $2,00,000$ |
|  | A | 80000 |  |  |  |
|  | B | 80000 |  |  |  |
|  | C | 40000 | $2,00,000$ |  |  |
|  |  |  |  |  |  |
|  |  |  | $2,00,000$ |  |  |

## Method 2

Premium paid is treated as an asset

## Joint Life Policy Account

Dr.
Cr.


## Method 3

Premium paid is treated as an asset and a reserve is created

## Joint Life Policy Account

| Date | Particulars | Rs. | Date | Particulars | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | To Bank A/c (premium) |  | 2006 | By Joint life policy Reserve A/c |  |
| Jan 1 |  | 20,000 | Dec 31 |  | 20,000 |
|  |  | 20,000 |  |  | 20,000 |
| $\begin{gathered} 2007 \\ \text { Jan } 11 \end{gathered}$ | To Bank A/c (premium) | 20,000 | $\begin{gathered} 2007 \\ \operatorname{Dec} 31 \end{gathered}$ | By Joint life policy <br> Reserve A/c <br> By Balance c/d | 16,000 |
|  |  |  |  |  | 4,000 |
| $\begin{aligned} & 2008 \\ & \text { Jan } 1 \end{aligned}$ |  | 20,000 |  |  | 20,000 |
|  | To Balance b/d To Bank A/c (premium) | $4,000$ | $\begin{gathered} 2008 \\ \text { Dec } 31 \end{gathered}$ | By Joint life policy <br> Reserve A/c <br> By Balance c/d | 15,000 |
|  |  | $20,000$ |  |  | $9,000$ |
|  |  | 24,000 |  |  | 24,000 |
| $\begin{aligned} & 2009 \\ & \text { Jan } 1 \end{aligned}$ | To Balance b/d To Bank A/c(premium) | 9,000 | $\begin{gathered} 2009 \\ \text { Apr } 15 \end{gathered}$ | By Bank A/c <br> (Money received) <br> By Joint life policy <br> Reserve A/c | 2,00,000 |
|  |  | 20,000 |  |  | 2,00,000 |
| Apr 15 | To partner capital A/c$\begin{aligned} & \mathrm{A}(2 / 5) \\ & \mathrm{B}(2 / 5) \\ & \mathrm{C}(1 / 5) \end{aligned}$ |  |  |  | 9,000 |
|  |  | 72,000 |  |  | 9,000 |
|  |  | 72,000 |  |  |  |
|  |  |  |  |  |  |
|  |  | 2,00,000 |  |  | 2,00,000 |

Joint Life Policy Reserve Account
Dr.
Cr.

| Date | Particulars | Rs. | Date | Particulars | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2006 \\ \operatorname{Dec} 31 \end{gathered}$ | To Joint Life Policy (Trf) |  | $\begin{gathered} \hline 2006 \\ \operatorname{Dec} 31 \end{gathered}$ | By Profit \& Loss <br> Appropriation A/c | 20,000 |
|  |  | 20,000 |  |  |  |
|  |  |  |  |  |  |
|  |  | 20,000 | $\begin{gathered} 2007 \\ \operatorname{Dec} 31 \end{gathered}$ |  | 20,000 |
| Dec 31 | To Joint life policy A/c (Rs.20,000 - Rs. 4,000) By Balance c/d | 16,000 4,000 |  | By Profit \& Loss Appropriation A/c | 20,000 |
| $\begin{gathered} 2008 \\ \operatorname{Dec} 31 \end{gathered}$ |  | 20,000 | $\begin{aligned} & 2008 \\ & \text { Jan } 1 \end{aligned}$ | By Balance b/d | 20,000 |
|  | To Joint life policy A/c (Rs. 24,000 - Rs. 9,000) To Balance c/d | 15,000 |  |  | 4,000 |
| $\begin{gathered} 2009 \\ \text { Apr } 15 \end{gathered}$ |  | 9,000 | Dec 31 | By Profit \& loss Appropriation A/c | 20,000 |
|  | To Joint Life policy (Trf) | 24,000 | $\begin{gathered} 2009 \\ \text { Jan } 1 \end{gathered}$ | By Balance c/d | 24,000 |
|  |  | 9000 |  |  | 9,000 |
|  |  | 9000 |  |  | 9,000 |

## Partnership Accounts - IV Dissolution,

Dissolution means discontinuance, Dissolution may be of two types.


Dissolution of a partnership
[Admission/Retirement/Death Of a Partner]

After dissolution of a firm, the partnership firm ceases to exist and no business would be carried on by the partners. But in the case of dissolution of partnership, only the partners change and the firm is reconstituted to carry on the business. Gajal and Arora in their 'Accounting Book' bring out the main grounds for dissolution as
D - Death [Death of a Partner]
I - Incapacity
S - Transfer of 'share' [Partnership share] to some other person
S - 'Serious misconduct' of partnership
O - Completion of 'Object' of the firm, for which it was formed.
L - 'Lunacy' of a partner
U - 'Unexpected Losses' of a firm
T - Expiry of the 'Term' of partnership
I - 'Insolvency' of one/all of the partners
O - Unlawful 'object' of the firm
N - 'Notice' given by all partners.
In this chapter we would be dealing with 'Dissolution of firms' as the dissolution of partnership has been explained in previous chapters.

### 21.1 Modes of Dissolution of a firm:

According to sec. 40 to 44 of Partnership Act, 1932. The following are the modes of dissolution of a firm:

## Compulsory Dissolution (sec.41)

(i) By the adjudication of all the partners or one of the partner as insolvent.
(ii) By the happening of an event which makes it unlawful for the firm to be carried on the business.

## Dissolution of agreement: (Sec.42)

A firm may be dissolved with the consent of all the partners or in accordance with a contract among them.

## Dissolution by notice: (Sec.43)

Any partner can dissolve the partnership by giving notice in writing to all other partners if the partnership is at will.

## Dissolution by court: (Sec.44)

A court may dissolve a firm on any one of following:
(i) Where a partner has becomes unsound mind, [i.e. of in same mind]
(ii) Where a partner becomes permanently incapable of doing his duties
(iii) Where a partner is found guilty of misconduct while carrying on the business.
(iv) Where a partner willfully or persistently commits breach of agreement.
(v) Where a partner transfers all his shares to a third party
(vi) Where the court of law finds that the business cannot be carried without loss.
(vii) On any other grounds which the court of law thinks just and equitable to wind up the business.

### 21.2Accounting Treatment

## Normal Dissolution

The following accounts are usually opened $n$ case of dissolution of a firm:


## Realisation Account

All assets and Liabilities are transferred to this account. When assets are realized they are credited to this account and when liabilities are paid they are debited to this account. The difference would represent either profit or loss on realization, which would be transferred to partner's capital account in their profit sharing ratio.

## Capital Account

After incorporating all the adjustments (including transfer of current accounts to capital accounts), the balance would represent either amount due to or due from partners. This capital Account would be closed either by payment of cash or by bringing in cash.

## Cash/Bank Accounts

After incorporating all the adjustments relating to cash or Bank, the balance of this account must be equal to the amounts due to or due from partners. Technically, the cash and bank account would close, when payment is made/received from partners.

## Journal Entries to close books of accounts :

## For closing Assets Accounts:

| Realisation A/c | Dr. | xxx |
| :---: | :---: | :---: |
| To Plant \& Machinerry A/c |  |  |
| To Furniture \& fixtures A/c |  | xxx |
| To Stock A/c |  | xxx |
| To Debtors A/c | xxx |  |
| To Investments A/c | xxx |  |
| To Goodwill A/c | xxx |  |
| [Being assets transferred to Realisation Account] |  |  |

The following points are to be noted while transferring the assets:-
(a) All assets [except cash \& bank] are to be transferred at "Book Value" only.
(b) Assets against which provision or reserve are created. These asses should be transferred at gross figure. [i.e without deducting the amount of provision / reserve]. Separate entry has to be passed to transfer the provisions : ie

| Provision for Bad \& doubtful doubtful debts A/c | Dr. | xxx |  |
| :--- | :--- | :--- | :--- |
| Provision for Depreciation A/c | Dr. | xxx |  |
| To Realisation A/c |  |  | xxx |

(c) Cash and bank balance would be transferred to Realisation Account if the firm is dissolved due to sale of business, unless specifically mentioned.
(d) When an of the assets is being taken over by a partner

Partner's Capital A/c
To realization A/c
Dr. xxx

Being asset taken by a partner]
(e) Treatment of Goodwill.
(i) Good will treatment does not have much impact in cases of dissolution. If it appears in the balance Sheet and it is treated like any other asset and is transferred to realization account at the book value.
(ii) If the goodwill does not appear in the balance sheet, it is not calculated.
(iii)If same amount is realized for Goodwill, then it is credited to Realisation Account.

## Cash A/c

Dr. $\quad \mathrm{xxx}$
To realization A/c
[Being cash realised for Goodwill]
(iv)If any of the partner's agree to pay for goodwill then it is recorded by the following entry;

| Partner's Capital (or) Current A/c | Dr. | xxx |  |
| :--- | :--- | :--- | :--- |
| To Realisation A/c |  |  | xxx |

[Being Goodwill taken by partner]

## For closing liabilities :

All liabilities are to transferred to Realisation account at their book value.
Liabilities A/c Dr.
To Realisation A/c
[Being transfer of liabilities to realisation account]

Liabilities can be discharged by any of the following ways.
(i) When cash is paid for any liability

Realisation A/c Dr. xxx
To Cash / Bank A/c xxx
[Being cash paid for payment of liability]
(ii) When any of partner agrees to discharge the liabilities

Realisation A/c Dr. xxx
To Partner's Capital (or) Current A/c xxx
[Being Liability take over by partner]

## Normal dissolution

## Illustration 1

Ram, Rahim and Suresh share profit in the ratio $3: 2: 1$. On $31^{\text {st }}$ December, 2008 their Balance Sheet was as follows:

| Liabilities | Rs. | Assets | Rs. |
| :---: | :---: | :---: | :---: |
| Creditors | 12000 | Machinery | 25000 |
| Genera Reserve | 3000 | Stock | 11000 |
| Capital : |  | Debtors | 9500 |
| Ram | 20000 | Goodwill | 13000 |
| Rahim | 15000 | Cash | 1500 |
| Suresh | 10000 |  |  |
|  | 60000 |  | 60000 |

On the above date, the firm was dissolved. The assets, except cash, realized Rs. 60,000. The creditors were settled at Rs. 11,500. Dissolution expenses amounted to Rs. 800. Give necessary ledger $\mathrm{A} / \mathrm{c}$ 's

## Solution

## Realisation Account

Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| To Machinery | 25000 | By Creditors | 12000 |
| To Stock | 11000 | By Cash [assets realized] | 60000 |
| To Debtors | 9500 |  |  |
| To Goodwill | 13000 |  |  |
| To Cash [Creditors paid] | 11500 |  |  |
| To Cash [Realisation Exp] | 800 |  |  |
| To Partner's capital A/c [Realisation of profit] |  |  |  |
| Ram 600 |  |  |  |
| Rahim 400 |  |  |  |
| Suresh $\underline{\underline{200}}$ | 1200 |  |  |
|  | 72000 |  | 72000 |

## Capital Account

Dr.
Cr.

| Particulars | $\begin{aligned} & \hline \text { Ram } \\ & \text { Rs. } \end{aligned}$ | Rahim Rs. | Suresh Rs. | Particulars | $\begin{gathered} \text { Ram } \\ \text { Rs. } \end{gathered}$ | $\begin{aligned} & \hline \text { Rahim } \\ & \text { Rs. } \end{aligned}$ | Suresh Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Cash A/c (cash paid to partners) | 22100 | 16400 | 10700 | By Balance b/d By General Reserve (3:2:1) | $\begin{array}{r} 20000 \\ \hline 1500 \end{array}$ | $\begin{array}{r} 15000 \\ 1000 \end{array}$ | $\begin{array}{r} 10000 \\ 500 \end{array}$ |
|  |  |  |  | By Realisation A/c | 600 | 400 | 200 |
|  | 22100 | 16400 | 10700 |  | 22100 | 16400 | 10700 |

Cash Account
Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d <br> To Realisation A/c <br> (Assets realised) | 1500 <br> 60000 | By Realisation A/c <br> (Creditors paid) <br> By Realisation A/c <br> (Realisation Exp) <br> By Partners Capital A/c <br> Ram <br> Rahim <br> Suresh | 11500 |

## Illustration 3

$S \& W$ are partners in firm sharing profit and loss in the ratio of 4:3. They have decided to dissolve the partnership on 31.3.2009 on which date their Balance Sheet stood as under:

| Liabilities | Rs. | Assets | Rs. |  |
| :--- | ---: | :--- | ---: | ---: |
| Capital : S | $\mathbf{1 6 0 0 0 0}$ | Plant | $\mathbf{1 2 0 0 0 0}$ |  |
| Wank Loan | $\mathbf{6 0 0 0 0}$ | Debtors | $\mathbf{9 0 0 0 0}$ | $\mathbf{8 6 0 0 0}$ |
| Creditors | $\mathbf{2 0 0 0 0}$ | (-) Provision | $\mathbf{4 0 0 0}$ | $\mathbf{1 2 0 0 0}$ |
|  | $\mathbf{8 0 0 0 0}$ | Trade Marks | 4000 |  |
|  |  | Furniture | $\mathbf{6 0 0 0 0}$ |  |
|  |  | Stock | $\mathbf{2 8 0 0 0}$ |  |
|  |  | Cash | $\mathbf{1 0 0 0 0}$ |  |
|  |  | Advertisement expenses | $\mathbf{3 2 0 0 0 0}$ |  |

The realization showed the following results:
(i) Debtors realized $90 \%$ of book value
(ii) Trade mark Rs. 8000
(iii)Goodwill was sold for Rs. 10000
(iv)Plant and stock were taken over by S for Rs. 144000 and Rs. 36000 respectively
(v) An unrecorded asset estimated at Rs. 6000 was sold for Rs. 2000

Discounts amounting to Rs. 800 were allowed b creditors while paying their claims. Expenses of realization amounted to Rs. 4000 . prepare Realisation A/c, Bank A/c and partners capital account assuming that settlement was made on 1.4.0

## Solution

## Realisation Account

Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| To Plant A/c | 120000 | By Provision for bad debts | 4000 |
| To Furniture A/c | 4000 | By Creditors A/c | 80000 |
| To Debtors A/c | 90000 | By Cash A/c (debtors Rs. 90000 | 81000 |
| To Trade Marks A/c | 12000 | X 90\%) |  |
| To Stock | 60000 | By Cash A/c (Trademark) | 8000 |
| To Cash A/c (Creditors | 79200 | By Cash A/c (Goodwill) | 10000 |
| Rs.80000-Rs.800) |  | To S's Capital A/c | 180000 |
| To Cash A/c (Exp) | 4000 | (Rs. $144000+$ Rs. 36000 ) <br> By Cash A/c (Unrecorded asset) <br> By Loss transferred to | 2000 4200 |
|  | 369200 |  | 369200 |

Note: Bank loan should not be transferred to Realisation account. It has be paid off directly.

## Partner's Capital Account

Dr.
Cr.

| Particulars | $\begin{gathered} \mathrm{S} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \text { W } \\ \text { Rs. } \end{gathered}$ | Particulars | $\begin{gathered} \text { S } \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \text { W } \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Advertisement expense (Rs. 10000 in 4:1) | 8000 | 2000 | $\begin{aligned} & \text { By Balance b/d } \\ & \text { By Cash A/c (Bal.fig) } \end{aligned}$ | $\begin{array}{r} 160000 \\ 31360 \end{array}$ | $60000$ |
| To Realisation A/c (Plant \& Stock) | 180000 | - |  |  |  |
| To Realisation A/c (loss) | 3360 | 840 |  |  |  |
| To Cash A/c (Bal.fig) | - | 57160 |  |  |  |
|  | 191360 | 60000 |  | 191360 | 60000 |

## CashAccount

Dr.
Cr.

| Particulars | Rs. | Rs | Particulars | Rs. | Rs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Balance b/d | 81000 | 28000 | By Realisarion A/c <br> Creditors <br> Realisation Exp |  | 83200 |
| To Realisation A/c |  |  |  | 79200 |  |
| Debtors |  |  |  | 4000 |  |
| Trademark | 8000 |  |  |  |  |
| Goodwill | 10000 |  | By Bank loan A/c <br> By W's Capital A/c |  | 20000 |
| Unrecorded assets | 2000 |  |  |  | 57160 |
| To S's capital A/c | $\begin{array}{r} 101000 \\ 31360 \\ \hline \end{array}$ |  |  |  |  |
|  |  | 160360 |  |  | 160360 |

### 21.3 Insolvency of a Partner

## Garner Vs Murray

If a partner capital account shows a debit balance on the date of dissolution of the firm, he has to pay the debit balance to the firm to settle his account. But, if such a partner is insolvent, i.e., unable to settle his debts to the firm his deficiency that he is not able to bear will be borne by the other solvent partners in accordance with the decision in Garner Vs. Murray. In this case, it was ruled that in the absence of any agreement to the contrary, the deficiency on account of the insolvent partner's capital account should be borne by the other solvent partners in proportion to their capitals which settle in the books of the firm before the dissolution of the firm. The loss on account of the insolvency of a partner is a capital loss and hence borne by other solvent partners in proportion to their capitals. Prior to this decision, the share of deficiency was borne by the partners in their profit-sharing ratio. Another ruling in Garner Vs. Murray is that the solvent partners should bring in cash equal to their loss on realization.

## Applicability of Garner Vs. Murray in India

In the absence of any specific provision in the Indian Partnership Act, 1932 and any decision of a court in India, it is a common practice to seek guidance from the English Law.

Therefore, it has became a practice in India to follow the decision of Garner Vs. Murray in the absence of any specific agreement between the partners with regard to sharing the deficiency of an insolvent partner.

## Illustration 7

The following is the balance sheet of the firm as on 31.03 .2010 as follows:

| Liabilities |  | Rs. | Assets | Rs. |
| :--- | :--- | ---: | :--- | ---: |
| Creditors |  | 204800 | Bank | 11000 |
| Loan Account - | P | 60000 | Debtors | 192120 |
|  | Q | 24000 | Stock | 128000 |
| Current Account -P | 42400 | Plant and Machinery | 57200 |  |
|  | Q | 5000 | Land and Buildings | 16800 |
| Capitals Account -P | 120000 | Current Account - R | 19880 |  |
|  | Q | 80000 |  |  |
|  | R | 40000 |  | 576200 |

It was decide to dissolve the firm on the date. The assets except bank balance realized Rs.453520. The firm had to pay Rs. 3000 for an outstanding bill not recorded earlier in the books. R became insolvent and a sum of Rs. 2000 was realized from his estate.
Prepare necessary ledger account. Close the books of the firm as per Garner Vs. Murray rule Solution

## Realisation Account

Dr.
Cr .

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Debtors | 192120 | By Creditors | 204800 |
| To Stock | 128000 | By Bank (assets) | 453520 |
| To Plant and Machinery | 57200 | By Loss transferred |  |
| To Land and Buildings | 168000 | P's Current A/c 31600 |  |
| To Bank (Exp) | 3000 | Q's Current A/c 31600 |  |
| To Bank (Crs.) | 204800 | R's Current A/c 31600 | 94800 |
|  | 753120 |  | 753120 |

R's Capital Account
Dr.
Cr .

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To R's current A/c <br> (Transfer) | 51480 | By Balance b/d <br> By Bank <br> By Deficiency <br> P's Current A/c 5688 <br> Q's Current A/c 3792 | 40000 |
|  | 51480 |  | 9480 |
|  |  |  | 51480 |

## Current Accounts

Dr.
Cr.

| Particulars | $\begin{gathered} \mathrm{P} \\ \mathrm{Rs} . \end{gathered}$ | $\begin{gathered} \mathrm{Q} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathrm{R} \\ \mathrm{Rs} . \\ \hline \end{gathered}$ | Particulars | $\begin{gathered} \mathrm{P} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathrm{Q} \\ \text { Rs. } \end{gathered}$ | $\begin{array}{r} \hline \mathrm{R} \\ \mathrm{Rs} . \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Realisation A/c | - | - | 19880 | By balance b/d | 42400 | 5000 | - |
| To Realisation A/c | 31600 | 31600 | 31600 | By capital A/c | - | - | 51480 |
| To R's Capital [Deficiency | 5688 | 3792 | - | By Bank | 31600 | 31600 |  |
| To Capital | 37612 | 1208 | - |  |  |  |  |
|  | 74000 | 36600 | 51480 |  | 74000 | 36600 | 51480 |

Capital Account (Solvent Partners)
Dr.
Cr.

| Particulars | P | Q | Particulars | P | Q |
| :--- | :---: | :---: | :--- | ---: | ---: |
| To Bank A/c | 156712 | 81208 | By balance b/d | 120000 | 80000 |
|  |  |  | By Current A/c | 36712 | 1208 |
|  | 156712 | 81208 |  | 156712 | 81208 |

## Cash Account

Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d | 11000 | By realisation | 3000 |
| To Realisation A/c | 453520 | By realisation A/c | 204800 |
| (Assets) | 31600 | By P's Loan A/c | By Q's Loan A/c |

## Insolvency of two partners

## Illustration 8

$\mathrm{P}, \mathrm{Q}, \mathrm{R}$ and S are partners sharing profits in the ratio of 4:3:2:1. Their position statement was as follows:

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Capital P | 30000 | Buildings | 44000 |
|  | Q | 20000 | Stock |

The firm is dissolved. All assets realized Rs. 82000. Liabilities are paid Rs. 58500 in full settlement. Outstanding Creditors are also paid Rs. 500. Expenses of Dissolution are Rs. 600. S became insolvent and R Paid Rs. 3000 .

## Realisation Account

Dr.
Cr.

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| To Buildings | 44000 | By Creditors | 40000 |
| To stock | 60000 | By Bank Loan | 20000 |
| To Bank (O/s Liabilities) | 58500 | By Bank(Assets) | 82000 |
| To Bank(O/s Creditors) | 500 | By Realisation loss b/d |  |
| To Bank - expenses | 600 | P | 8640 |
|  |  | Q | 6480 |
|  |  | R | 4320 |
|  |  |  |  |
|  |  | S | 2160 |
|  |  |  | 21600 |
|  |  |  |  |

## Capital Account (Insolvent Partners)

Dr.
Cr.

| Particulars | R <br> Rs. | S <br> Rs. | Particulars | R <br> Rs. | S <br> Rs. |
| :--- | ---: | :---: | :--- | ---: | ---: |
| To balance b/d | 3500 | 1000 | By Bank | 3000 | - |
| To Realisation A/c | 4320 | 2160 | By P's capital | 2892 | 1896 |
| (Loss) |  |  | By Q's capital | 1928 | 1264 |
|  |  | 7820 | 3120 |  | 7820 |
|  |  |  |  | 3160 |  |

R's Deficiency $=$ Rs. 4820 to P and Q in the ratio of 3:2
S's Deficiency = Rs. 3160 to P and Q in the ratio of 3:2

## Capital Account (solvent Partners)

Dr.
Cr.

| Particulars | $\begin{gathered} \mathrm{P} \\ \text { Rs. } \end{gathered}$ | $\begin{aligned} & \mathrm{Q} \\ & \mathrm{Rs} \end{aligned}$ | Particulars | $\begin{gathered} \mathrm{P} \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} \mathrm{Q} \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Realisation A/c (Loss) | 8640 | 6480 | By Balance b/d | 30000 | 20000 |
| To R's Capital | 2892 | 1928 | By BankA/c | 8640 | 6480 |
| To S's Capital | 1896 | 1264 |  |  |  |
| To Bank (Bal.Fig.) | 25212 | 16808 |  |  |  |
|  | 38640 | 26480 |  | 38640 | 26480 |

## Cash Account

Dr.
Cr .

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d | 1500 | By Realization(Exp.) | 600 |
| To R's capital | 3000 | By Realization A/c <br> (58500+500) | 59000 |
| To Realization (Assets) | 82000 | By Capital A/c - P 25212 |  |
| To P's capital | 8640 | (Bal. Fig) |  |
| To Q's capital | 6480 |  | 42020 |
|  | 101620 |  | 101620 |
|  |  |  |  |

## Insolvency of all Partners

## Illustration 9

The balance sheet M, V, A as on 31.12.2009 is given below.

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Capital M | 10000 | Debtors | 40000 |
| M | 6000 | Bank | 2000 |
| M's Loan | 20000 | Furniture | 6000 |
| Creditors | 80000 | A's Capital | 2000 |

## Bank Account

Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d | 2000 | By Realization A/c (Exp.) | 6000 |
| To Realization (Assets) | 64000 | By Creditors (Bal. Fig) | 63000 |
| To M's capital A/c (privater) | 3000 |  | 69000 |
|  | 69000 |  |  |
|  |  |  |  |

## Creditors Account

Dr.
Cr.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Bank A/c | 63000 | By balance b/d | 80000 |
| To deficiency (Bal. fig) | 17000 |  | 80000 |
|  | 80000 |  |  |


| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To V's capital A/c | 6000 | By M's capital | 21000 |
| To A's capital A/c | 32000 | By Creditors A/c | 17000 |
|  | 38000 |  | 38000 |

### 21.4 Piecemeal Distribution

In Dissolution of a firm, it is assumed that all the amount due to the creditors and partners are settled on the date of dissolution itself; but this assumption is unrealistic and practically impossible because the process of realizing the assets and payment of liabilities takes some time.

In such a case, when there is a gradual realization of assets it is necessary to avoid the unpleasant consequences of a partner's account being overdrawn. Distributing cash of various realization of assets in such a way that the final unpaid balance of the capital of each partner is left in is profit-sharing ratio. The final profit or loss on realization can be determined only after all the assets are realized and all the liabilities are paid off. The partners get their capital gradually as and when the amount is received after settlement of third party liabilities. The Following order of payment is followed in gradual realization.

1) The debts of the firm to third parties have to be aid.
2) Amount due to partner as loan to be paid (if any)
3) Then, the capital of the partners to be paid out of the remaining amount.

The Payment are made by adopting any one of the following two methods

1) Proportionate Capital method
2) Maximum Loss method

## 1.Proportionate Capital Method

It is also known as "Highest Relative Capital Method". According to this method the partner who has the higher relative capital, that is whose capital is greater in proportion to his profitsharing ratio, is first paid off. For determining the amount by which the capital of each partner is in excess of his relative capital, the least capital is taken as base and the capital of other partners are made to proportionate to their profit sharing ratio. This is called as their hypothetical capital. The amount of hypothetical capital of each partner is deducted from the amount of actual capital. The resultant amount will be the excess capital held by him. This excess amount is paid to these partners in the "Excess Capital Proportion Ratio". After this payment the partner's capital will be on their profit sharing ratio and further realization amount is distributed in the profit sharing ratio. When the final realization is distributed, the balance of unpaid capital is the "Loss on Realization".

## Illustration 10

From the Balance Sheet of A, B and C who share the profits and losses in 2:2:1 ratio, prepare the statement distribution of cash.

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Sundry Creditors | 30000 | Cash | 4000 |
| Capital | A | 30000 | Sundry Debtors |
|  | B | 24000 | Stock |

The firm was dissolved and the assets were realized gradually. Rs. 20000 was received first, Rs. 30000 was received next and Rs. 180000 finally.

## Solution

Note: Proportionate capital method is adapted in this problem, so the partners A \& B have a greater proportion in their capitals compared to partner C. C has the least capital of Rs.8000, so his capital is taken as the base for computing excess capitals of A \& B.

## Refer working notes in the next page

## Statement of distribution of cash

| Particulars | Sundry |  | Capitals |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Creditors | A | B | C |
| Capital as per Balance Sheet | 30000 | 30000 | 24000 | 8000 |
| Less: Cash in Hand | 4000 | - | - | - |
| Balance due | 26000 | 30000 | 24000 | 8000 |
| Less: I Realization (Rs.20000) | 20000 | - | - | - |
| Balance due | 6000 | 30000 | 24000 | 8000 |
| Less: II Realization (Rs.30000) |  |  |  |  |
| Rs.6000 to Creditors | 6000 | - | - | - |
| Rs.22000 to A \& B in 7:4 | - | 14000 | 8000 | - |
| Rs.2000 to A, B \& C in (2:2:1) | - | 800 | 800 | 400 |
| Balance due | - | 15200 | 15200 | 7600 |
| Less: III Realization | - |  |  |  |
| (Rs.18000 in 2:2:1) |  | 7200 | 7200 | 3600 |
| Loss on Realization | - | 8000 | 8000 | 4000 |
| Profit sharing ratio | 2 | 2 | 1 |  |

## Working notes:

Capital of C is taken as the basic capital $=$ Rs. 8000
(since being the least capital of $\mathrm{A}, \mathrm{B} \& \mathrm{C}$ )

Capital of the Firm based on C's Capital $=$ Rs. 40000

|  | A | B | C |
| :--- | :---: | :---: | :---: |
| Capital as per balance sheet | 30000 | 24000 | 8000 |

Less: Capital based on C's Capital

| (Rs. 40000 in 2:2:1) | 16000 | 16000 | 8000 |
| :---: | :---: | :---: | :---: |
| Surplus capital (Excess Capital) | 14000 | 8000 | - |

Total surplus Rs. 22000 (Rs. 14000+Rs.8000) will be shared in their excess capital proportion ratio i.e. 7:4

## Illustration 11

The following is the balance sheet of $\mathrm{A}, \mathrm{B}$ and C on 31.12.2009. On that date they decided to dissolve the partnership

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Sundry Creditors | 2000 | Sundry Asset | 49000 |
| A's Loan | 5000 |  |  |
| Capital A | 15000 |  |  |
| B | 18000 |  |  |
|  | 9000 | 49000 |  |

The assets realized the following sums in instalments:

I - Rs.1000, II - Rs.3000, III - 3900, IV - Rs. 6000 and finally V - Rs.20100. The Expenses of realization amounted to Rs. 100 only. The partners share profit and losses in the ratio of 2:2:1. Show how the distribution of cash is made.

## Solution

Calculation of Proportionate Capital

|  |  | A | B |
| :--- | :---: | :---: | :---: |
| Capital | (X) | 15000 | 18000 |$⿻$| C |
| :---: |
| Profit Sharing Ratio |
| Capital (Divided by <br> Profit sharing ratio) |

Statement of distribution of cash

| Particulars | Creditors | $\begin{aligned} & \text { A's } \\ & \text { loan } \\ & \hline \end{aligned}$ | Particulars |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A (Rs.) | B(Rs.) | C (Rs.) |
| Balance as per balance sheet | 2000 | 5000 | 15000 | 18000 | 9000 |
| Less: I Reduction (Rs.1000) | 1000 | - | - |  |  |
| Balance due | 1000 | 5000 | 15000 | 18000 | 9000 |
| Less: II Realization(Rs.3000) |  |  |  |  |  |
| Rs. 1000 to Sundry Creditors, Rs. 2000 to A's Loan | 1000 | 2000 | - | - |  |
| Balance due | - | 3000 | 15000 | 18000 | 9000 |
| Less: III Realization(Rs.3900) |  |  |  |  |  |
| Rs. 3000 to A's Loan | - | 3000 | - | - | - |
| Rs. 9000 to B \& C in 2:1 (ECR) | - | - | - | 600 | 300 |
| Balance due | - | - | 15000 | 17400 | 8700 |
| Less: IV Realization(Rs.6000) |  |  |  |  |  |
| Rs. 3600 to B \& C in 2:1 (ECR) | - | - | - | 2400 | 1200 |
| Rs. 2400 to A, B, C in 2:2:1 | - | - | 960 | 960 | 480 |
| Balance due | - | - | 14040 | 14040 | 7020 |
| Less: V Realization | - |  |  |  |  |
| (Rs.20100in 2:2:1) |  | - | 8040 | 8040 | 4020 |
| Loss on Realization | - | - | 6000 | 6000 | 3000 |
| Profit sharing ratio |  |  | 2 | 2 | 1 |

## Maximum Loss Method

In the process of gradual distribution of cash under the maximum loss method, it is assumed that each installment realized is considered to be final payment and there is no further realization. Outstanding assets and claims are considered to be worthless. So partner's account are adjusted on that basis. The maximum loss is the difference between the total amounts due to partners and the amount available. The maximum loss is ascertained at every stage of realization and the same is distributed among the partner's in their profit-sharing ratio. In this process there is a possibility of partner having debit balance which is presumed deficiency and the partner as insolvent and this deficiency is shared by solvent partners in their capital ratio. This process is applied in all stages of realization. The balance unpaid capital is the loss on realization, which will be I their profit sharing ratio.

## Illustration12

$\mathrm{X}, \mathrm{Y}$ and Z are partners in a firm, who are sharing profits and losses in the proportions of 3:2:1 respectively. The following is the balance sheet as on 31.12.2009. On that date they decided to dissolve the partnership

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Sundry Creditors | 10000 | Cash | 120000 |
| X | 45000 | Sundry Debtors | 10000 |
| Y | 45000 |  |  |
| Z | 30000 |  | 130000 |
|  | 130000 |  |  |

The firm is dissolved and the realizations of assets were as follows:

## Realization

I
II
15000 22500
III

Prepare a statement showing how the distribution of cash has been made under maximum loss method.

## Solution

Statement of distribution of cash


## Partnership Accounts - V

## Amalgamation of Firms and sale to a Company

### 22.1 Amalgamation of Firms and Sale to a Company

## Amalgamation of Firms

When two or more firms of independent in nature engaged in similar or identical business combine their activities together into a new firm for achieving their better growth, larger operation and mutual benefits. This Combination or merger of firms their resources and carrying on the business in an integrated unit as a new firm is known as 'Amalgamation of Firms'

## Objectives of Amalgamation of Firms:

1. To have larger operation
2. To grow bigger in Size
3. To gain monopoly
4. To avoid heavy competition
5. To reduce unwanted expenditure like advertising
6. To have increased capital
7. To have better skills and efficiency in work.
8. To achieve large and massive production with minimum cost.
9. To combine the resources.

## Closing Entries in the books of Amalgamating Firms

| Sl. No. | Particulars | Dr | Debits(Rs.) | Credits(Rs.) |
| :--- | :--- | :--- | :--- | :--- |
| 1. | When Assets are taken over <br> By the new firm <br> New Firm's A/c <br> To Assets A/c <br> When Liabilities are taken over by new firm <br> Liabilities A/c <br> To New Firm's A/c <br> When Assets are not taken over by the new firm <br> Partner's Capital A/c (in Capital Ratio) <br> To Assets A/c <br> When Liabilities are not taken over by the new firm <br> Liabilities A/c <br> To Partner's Capital A/c (in Capital Ratio) | Dr | Dr |  |
| 4. | Dr |  |  |  |

For Entry (1) and (2), an Compound entry may also be passed as
Liabilities A/c Dr
New's Firms A/c Dr
To Assets A/c

Operating Entries in the Books of new firm

| Si. No | Particulars | Debits(Rs.) | Credits(Rs.) |
| :--- | :--- | :--- | :--- |
| 1. | When Assets and Liabilities are taken over <br> Assets A/c <br> To Liabilities A/c <br> To Partner's Capital A/c |  |  |
| 2. | When excess capital is adjusted <br> (paid to partners) <br> Partner's Capital A/c <br> To Cash A/c | Dr |  |
| 3. | When Cash is brought in by Partners <br> Cash A/c <br> To Partner's Capital Account | Dr |  |

## Branch Accounts

Business is carried out in different areas scattered over a large territory. As the business grows in size, it opens branches for selling its products over a larger territory.

A manufacturer or producer of products wants to sell his goods in different places and also wants the products to reach different places. In order to sell their goods on a larger scale, it is necessary to open various branches in different places. The branches of a business can be located in the same city or in different cities or towns. The various divisions of a business situated in different places are called as branches. The branches are the subsidiary units of the head office which is the main place of business. The principal place of business called the Head office and the branches carry the same or almost the same activities that of the head office carries.

Therefore, branches are unit under the head office, located at different places which are selling the same products or carrying out same activities as the head office does. Besides business concerns, banks, insurance companies have branches over a region and also over the country.

When the business is carried out in a larger area with several branches, it becomes necessary to have the records of transactions related to such subsidiary units separately which help the head office to know the working efficiency and the result of each unit and also the entire business. The records are maintained or written up by the head office in branch accounts.

### 15.1 Objects of Branch Accounts

The business estabilishes it branches at different places for marketing its products. The head office wants to know the trading or the working results of its branches, so they keep branch accounts

The main objectives of branch accounts are:

1. To ascertain the profit or loss of the branches.
2. To have a better control over the branches by the head office
3. To know the financial position of the branches.
4. To enable the head office to know the requirements of goods and cash of each branch.
5. To provide suggestions for improvements.
6. To formulate further programmes and policies relating to the branches

### 15.2 Types of Branches

Branches can be divided on the basis of location

1. Home branches
(a) Dependent branch
(b)Independent branch
2. Foreign branches


## Dependent branch

These branches are inland branches wholly dependent on the head office for all their requirements. These branches do not maintain their own set of books, and all the records of the branch are maintained by the head office. It is wholly controlled and administrated by the head office

Main features of a dependent branch are,

1. Dependent branches do not maintain its books of accounts. The head office keeps the records relating to the branch.
2. Goods are supplied by head office to the branch.
3. Branch receives the goods and sells them as per the directions of the head office.
4. All the expenses of branches are paid directly by the head office.
5. The head office provides petty cash to the branch to meet some petty expenses, so only simple petty cash book is maintained at the branch.
6. The branch remits cash to the head office which are from the sale proceeds and collection from debtors in case of credit sales.

### 15.3 Accounting System

The dependent branch sends returns periodically as per the directions of head office. Based on this, the head office keeps the accounts of the particular branch for a particular period of time to know the profit or loss of the branch. The following are the systems of accounts maintained by the head office.

1. Debtors system
2. Stock and debtors system
3. Final account system
4. Wholesale branch system

## Debtors System

In this system the head office opens account for each branch separately and records the transactions. This type of system is adopted when the branch is small in size. The branch account is a nominal account in nature. The branch account is debited with the goods sent to
the branch by the head office and the expenses met by the head office. All the remittances and returns are credited to this account and so this system is similar to a debtors account. Therefore it is called a Debtors system. The profit of branch will be when there is an excess of credit over debit items and loss when there is an excess of debit over credit items which are transferred to the general P $\mid \& \mathrm{~L} \mathrm{~A} / \mathrm{c}$ of the head office.

## Proforma of Branch Account

## In the books of head office

## Branch Account (at cost)

\begin{tabular}{|c|c|c|c|c|c|}
\hline Particulars \& \& Rs \& Particulars \& \& Rs \\
\hline \begin{tabular}{l}
To Balance b/d (opening balance of assets) Stock (cost) \\
Petty cash \\
Debtors \\
Fixed assets (if any)
\end{tabular} \& \[
\begin{aligned}
\& \mathrm{xx} \\
\& \mathrm{xx} \\
\& \mathrm{xx} \\
\& \mathrm{xx}
\end{aligned}
\] \& xxx \& \begin{tabular}{l}
By balance b/d (opening balance of liabilities if any ) \\
Creditors \\
Outstanding expenses etc
\end{tabular} \& \& xx \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
To Goods sent to Branch (cost) \\
To Bank : \\
(Expenses paid to H.O) \\
Rent \\
Salary \\
Petty expenses etc \\
To profit (transferred to general P \& L A/c)* \\
To Balance c/d \\
(closing balance of liabilities if any) \\
Creditors \\
Outstanding expenses etc
\end{tabular}} \& \[
\begin{aligned}
\& \mathrm{xx} \\
\& \mathrm{xx} \\
\& \mathrm{xx}
\end{aligned}
\] \& xxx

xxx \& | By Remittances : |
| :--- |
| Cash sales Collection from debtors |
| By Goods returned by branch (cost) |
| By Loss (transferred to general P \& L A/c)* | \& xx

xx \& xx
xx

xx <br>

\hline \& $$
\begin{aligned}
& \mathrm{Xx} \\
& \mathrm{xx}
\end{aligned}
$$ \& xxx

xxx \& | By balance c/d (closing balance of assets) |
| :--- |
| Stock (cost) |
| Petty cash |
| Debtors |
| Fixed assets | \& xx

xx
xx
xx \& xxx <br>
\hline \& \& xxx \& \& \& xxx <br>
\hline
\end{tabular}

*The balance amount of the Branch account may be either profit or loss.

Journal entries in the books of head office for recording the transactions :
(i) To records the value of assets at the branch on beginning
Branch A/c
Dr. xx

To stack A/c xx
To Petty cash A/c xx
To Debtors A/c xx
To Fixed assets A/c xx
(ii) To record the value of liabilities (if any)

Creditors A/c Dr. xx
Outstanding Expenses A/c
Dr. xx
To Branch A/c
xx
(iii) For goods sent to branch

Branch A/c Dr. xx
To Goods sent to branch A/c
xx
(iv) For expenses met by head office

Branch A/c Dr. xx
To Bank (expenses) A/c xx
(v) For goods returned by branch
Goods sent to branch A/c Dr. xx
To Branch A/c
xx
(vi) For remittance by branch to head office, the amout of cash by sales and collection from debtors
Bank A/c
Dr. xx

To Branch A/c XX
(vii) For closing balance of assets at branch

| Stock A/c | Dr. | xx |
| :--- | :--- | :--- |
| Petty cash A/c | Dr. | xx |
| Debtors A/c | Dr. | xx |
| Fixed assets A/c | Dr. | xx |

To Branch A/c
(viii) For closing balance of liabilities if any
Branch A/c
Dr. xx
To creditors A/c
To outstanding expenses A/c xx
(ix) For branch profit

Branch A/c Dr. xx
To General profit or loss A/c
xx
(x) For branch loss

General profit or loss A/c
Dr. xx
To Branch A/c
xx

## Illustration I

From the following particulars of Chennai branch for the year ending 31.12.2003, prepare branch $\mathrm{A} / \mathrm{c}$ in the books of head office.

| Stocks on 1.1.2003 | 10,000 |
| :--- | ---: |
| Debtors | 20,000 |
| Petty cash on 1.1.2003 | 1,500 |
| Goods sent to branch at cost | 85000 |
| Cash sent to branch for |  |
| Rent |  |
| Salaries | 2,000 |
| Cash sales | 3,000 |
| Collection from debtors | 50,000 |
| Goods returned by branch to head office | 30,000 |
| Stock on 31.12.2003 | 5,000 |
| Debtors on 31.12.2003 | 15,000 |
| Petty cash on 31.12.2003 | 28,000 |
|  | 1,000 |

## Solution

## In the Books of Head Office <br> Chennai Branch Account

| Dr. |  |  |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | Rs. | Date | Particulars | Rs |
| $\begin{aligned} & 2003 \\ & \text { Jan } 1 \end{aligned}$ | To Balance b/d Stock <br> Debtors <br> Petty cash | 10,000 | $\begin{array}{\|l\|} \hline 2003 \\ \text { Dec } 31 \\ \hline \end{array}$ | By Remittance : <br> Cash sales <br> Collection from <br> debtors <br> By goods returned by <br> branch <br> By balance c/d <br> Stock <br> Debtors <br> Petty cash |  |
|  |  |  |  |  | 50,000 |
|  |  | 20,000 |  |  |  |
|  |  | 1,500 |  |  | 30,000 |
| Dec 31 <br> Dec 31 | To Goods sent to branch To Bank: <br> Rent <br> Salaries <br> To Profit <br> (transferred to general P \& L A/c) | 85,000 |  |  | 5,000 |
|  |  |  |  |  |  |
|  |  | 2,000 |  |  | 15,000 |
|  |  | 3,000 |  |  | 28,000 |
|  |  |  |  |  | 1,000 |
|  |  | 7,500 |  |  |  |
|  |  | 1,29,000 |  |  | 1,29,000 |

When to prepare branch debtors Account
Branch debtors $\mathrm{A} / \mathrm{c}$ is prepared to record the transactions relating to the Debtors of the branch to ascertain the amount of closing balance of debtors. This account is prepared as a working
note. It is necessary to open a branch debtors $\mathrm{A} / \mathrm{c}$, if the problem does not have any of the following items.

1. Credit sales
2. Opening debtors
3. Closing debtors
4. Cash collected from debtors

Proforma of the branch debtors Account

| Particulars | Rs | Particulars | Rs |
| :---: | :---: | :---: | :---: |
| To balance b/d (opening debtors) To Credit sales (Total sales-cash sales) | xx | By Cash (collection from debtors) | xx |
|  | xx | By Sales returns | $\mathbf{x x}$ |
|  |  | By discount | xx |
|  |  | By Bad depts. <br> By B/R | xx |
|  |  | By Balance c/d (closing debtors) | $\mathbf{x x}$ |
|  | xx |  | xx |

## Illustration 2

From the following particulars calculate the debtors balance at the end.

| Opening balance of debtors | 40,000 |
| :--- | ---: |
| Total sales | $1,60,000$ |
| Cash sales | 20,000 |
| Cash received from debtors | 60,000 |
| Bad debts | 4,000 |
| Returns inwards | 1,000 |
| Bills received from customers | 18,000 |

[University of Madras, B.Com. Nov 2008]

## Solution

## Debtors Account

Dr. Cr.

| Particulars | Rs | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d | $\mathbf{4 0 , 0 0 0}$ | By cash | $\mathbf{6 0 , 0 0 0}$ |
|  |  | By Bad debts |  |
| To credit sales | $\mathbf{1 , 6 0 , 0 0 0}-\mathbf{2 0 , 0 0 0})$ | $\mathbf{1 , 4 0 , 0 0 0}$ | By Return inwards |
|  |  | By B/R | $\mathbf{1 , 0 0 0}$ |
|  |  | By Balance c/d | $\mathbf{1 8 , 0 0 0}$ |
|  |  |  | $\mathbf{9 7 , 0 0 0}$ |
|  | $\mathbf{1 , 8 0 , 0 0 0}$ |  | $\mathbf{1 , 8 0 , 0 0 0}$ |

## Illustration 3

Santhosh \& Co Chennai, opened a branch at Trichy on 1.1.2004. The following information relate to the branch for the year 2004.

|  | Rs. |
| :--- | ---: |
| Goods sent to branch | 45,000 |
| Cash sales at branch | 30,000 |
| Credit sales at branch | 36,000 |
| Salaries paid by head office | 9,000 |
| Office expenses by head office | 7,200 |
| Cash remittance to branch for petty cash | 3,600 |
| Stock on 31.12.2004 | 16,200 |
| Debtors on 31.12.2004 | 3,000 |
| Petty cash on 31.12.2004 | 300 |

Prepare branch A/c to find out the profit or loss of the branch.

## In the Books of Santhosh \& Co (Head Office) Trichy Branch Account

Dr.
Cr.

| Particulars |  | Rs | Particulars |  | Rs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To goods sent to Branch <br> Salaries | 9,000 | 45,000 | By Remittance; Cash sales Collection from debtors | $\begin{aligned} & 30,000 \\ & 33,000 \end{aligned}$ | 63,000 |
| To Cash (remittance to branch) |  | 3,600 | By Balance c/d Stock | 16,200 |  |
| To Profit (transferred to general P \& L A/c) |  | 17,700 | Debtors <br> Petty cash | $\begin{array}{r} \mathbf{3 , 0 0 0} \\ \mathbf{3 0 0} \end{array}$ | 19,500 |
|  |  | 82,500 |  |  | 82,500 |

## Workings:

Branch Debtors Account
Dr.

| Particulars | Rs | Particulars | Cr |
| :--- | ---: | :--- | ---: |
| To Credit sales | $\mathbf{3 6 , 0 0 0}$ | By cash (?) <br> By balance c/d | $\mathbf{3 3 , 0 0 0}$ |
|  |  |  | $\mathbf{3 , 0 0 0}$ |
|  |  |  |  |
|  |  | 36,000 |  |

Notes:

1. Since it is a newly opened branch, there will by no opening balance of assets or liabilities.
2. Branch debtors $\mathrm{A} / \mathrm{c}$ is prepared to know the amount of cash collected from debtors which was missing.

## Illustration 7

From the following particulars relation to Salem branch for the year ending 31.12.2006, prepare the branch $\mathrm{A} / \mathrm{c}$ in the books of head office.
Stock (1.1.2006) ..... 18,000Rs.
Debtors (1.1.2006)
Petty cash ..... 120
Goods sent to branch during 2006 ..... 30,000
Goods returned by branch during 2006 ..... 360
Cash sales ..... 18,000
Credit sales ..... 25,200
Sales returns too branch ..... 150
Bad debts ..... 60
Discount allowed to customers ..... 180
Expenses of branch met by H.O ..... 2,100
Table and chair purchased by the branch ..... 600
Cash collected from customers ..... 21,000
Stock (31.12.2006) ..... 7,500
Debtors (31.12.2006) ..... ?
Petty cash (31.12.2006) ..... 180

## Solution

In the Books of Head Office
Salem Branch Account

| Dr. |  |  | Cr. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Rs. |  |  | Rs. |
| To Balance b/d |  | By Remittance: |  |  |
| Stock | 18,000 | Cash sales | 18,000 |  |
| Debtors | 7,200 | Collection from debtors | 21,000 |  |
| Petty cash | 120 |  | 39,000 |  |
|  |  | (-) Purchase of table \& chair | 600 | 38,400 |
| To Goods sent to branch A/c | 30,000 | By Goods returned by branch |  | 360 |
| To Bank (expenses) | 2,100 | By Balance c/d Stock |  | 7,500 |
| To Profit (transferred to general p\&LA/c) |  | Debtors |  | 11,010 |
|  |  | Petty cash |  | 180 |
|  | 630 | Table \& chair |  | 600 |
|  | 58,050 |  |  | 58,050 |

Dr.

| Particulars | Rs | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To balance b/d | 7,200 | By cash | $\mathbf{2 1 , 0 0 0}$ |
| To Credit sales | 25,200 | By Returns | $\mathbf{1 5 0}$ |
|  |  | By Discount | $\mathbf{1 8 0}$ |
|  |  | By Bad debts | $\mathbf{6 0}$ |
|  |  | By balance c/d (?) | $\mathbf{1 1 , 4 1 0}$ |
|  |  |  |  |
|  |  |  | 32,400 |

## Goods sent to Branch at invoice

When goods are sent at invoice price to branches, the head office usually sends goods at cost price. But sometimes, they also send goods to their branches at a price which is cost plus certain percentage called as invoice price or selling price or loaded price. The branches sell the products based on the price mentioned in the invoice. The real profit is not revealed to the branch. In this case the opening stock, closing stock, goods sent to branch and goods returned by branch will be at invoice price. In order to ascertain the real profit, the load or the excess amount on the above items has to be removed. So it becomes essential to make adjustment entries to remove the difference between the invoice price and the cost price.

The adjustment entries are

## For opening stock at invoice price

Stock reserve A/c
To Branch A/c
Dr. xx
(The amount of load only)
For the closing stock at invoice price
Branch A/c
Dr. xx
To Stock reserve A/c
(The amount of load only)
For goods sent to branch at invoice price
Goods sent to branch A/c
To Branch A/c
Dr. xx
(The amount of load only)

## For goods returned by branch to $\mathbf{H . O}$ at invoice price

## Branch A/c

Dr. xx
To Goods sent to branch A/c xx
(The amount of load only)
The adjustments in the branch $\mathrm{A} / \mathrm{c}$ (a part from the other items in the proforma)

Branch Account


## Illustration 9

A head office has a branch at Erode to which goods are sent at invoice price which is cost plus $25 \%$. From the following particulars, prepare the branch A/c in the book of head office.

| Debtors on 1.1.2006 |  | 20,000 |
| :--- | :---: | :---: |
| Stock on 1.1.2006 |  | 10,000 |
| Cash Sale | $2,00,000$ |  |
| Credit Sales | $1,50,000$ |  |
| Cash collected from debtors |  | 85,000 |
| Debtors on 31.12.2006 |  | $?$ |
| Stock on 31.12.2006 |  | 8,500 |
| Goods sent to branch |  | 50,000 |

## Solution

## In the Books of Head Office

## Erode Branch Account

Dr


## Branch Debtors Account

Dr
Cr

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | ---: |
| To Balance b/d | 20,000 | By Cash | 85,000 |
| To Credit sales | $1,50,000$ | By Balance c/d (?) | 85,000 |
|  | $1,70,000$ |  | $1,70,000$ |

## Departmental Accounts

In modern days, any business house may buy and sell various types of products or render different services under one roof. The business normally divides itself into departments, allocating to each department a particular activity.
e.g: A supermarket may have 'provision department', 'Crockery department', 'stationery department' etc.

Department brings in specialization and also better customer service. When accounts are finalized at the year end. Separate Trading and Profit and Loss Account and Balance Sheet are prepared to know the financial position of each department and it helps to understand the department's results and its relative performance which help the management to take better decisions. In the case of a business having more than one line, a single trading and profit and loss account for the entire business would not reveal the profit/loss of each department in a detailed manner. Some departments may incur profit while some other may incur loss, and this would be revealed only when Departmental wise trading account is prepared moreover, control and economy over expenses is also essential. This would be possible only when expenses are allocated department wise and the compared with other departments.

The method of accounting that is followed to obtain department wise results is known as "Departmental Accounting".

### 16.1 Need for Departmental Accounting

The need for Departmental accounting is due to the following reasons:
(a) To have comparative results of Departments.
(b) To assess the stock position of each department.
(c) To analyse the result of each department and to draw up a trend for the future.
(d) To decide upon whether to go for expansion or discontinuation or to take cost control measures

## Expenses which can be apportioned

All the expenses which can be apportioned on some logical or appropriate basis among the departments are called as "Expenses which can be apportioned". They are charged to the respective department.

The following table lists out the usual logical basis for apportionment of expenses:

|  | Expenses | Basics |
| :---: | :---: | :---: |
| $\begin{array}{cc} \hline \text { A } & \text { (i) } \\ & \text { (ii) } \\ & \text { (iii) } \\ & \text { (iv) } \\ & \text { (v) } \\ \hline \end{array}$ | Rent and Rates <br> Repairs and maintenance of building <br> Depreciation of building <br> Lighting expenses(if light points are not Available) <br> Insurance of Building | "Floor Area" or "Space occupied" by each department |
| B (i) | Lighting | Number of "Light points" in each department |


| C (i) | Electirc power for machines | (a)If separate meter is available as per meter readings of each department (or) <br> (b)H.P of each machine is department(or) <br> (c) Number of machines in each department (or) <br> (d) Working/running hours in each department |
| :---: | :---: | :---: |
| D (i) <br>  (ii) <br>  (iii) <br>  (iv) | Staff salary <br> Workmen's amenities and welfare expenses <br> ESI, PF, payable by employer <br> Canteen Expenses | No. of staff in each department |
| E (i) | Expenses on purchases like carriage Inwards, freight, duty etc., | "Purchase value" of each department |
| F | Depreciation of asset like furniture, fixtures, machinery etc., | Value of assets possessed by each department |
| G | Selling expenses like salesman commission, advertisement, Bad debts, discounts, carriage outwards etc., | (a) Sales ratio or turnover Ratio (or) <br> (b) Ratio of sales value/sales quantity |
| H | Insurance of stock | On the basis of value of stock possessed by each department |
| I | Factory manager's salary | Time devoted to each department by the manager |

The apportionment made on expenses should be on logical basis, but if the information regarding the basis is not available, the other best alternative basis with reasonable logic can be taken for apportionment.

## Distinction between Departments and Branches

|  | Department | Branches |
| :--- | :--- | :--- |
| Location | All departments are located under <br> one roof in the same business. | Branches of same business can be <br> located it different places in the <br> same city or outside the city or <br> country. |
| Accounting | All accounting records are <br> maintained centrally in the same <br> premises. | Branches books of accounts are <br> separately maintained. At the year <br> end Head Office consolidates all the <br> branch account. |
| Growth | Departments can grow vertically <br> within the same roof. | Branches can grow geographically. <br> They can expand to different places. |

## Ascertainment of cost of departmental purchases

## Illustration 1 (Preparation of Trading Account)

Rama Departmental stores has two departments-provisions and Fancy mart. From the following, prepare departmental Trading account.

## Purchase:

Provisions Department - 1,000 units
Cosmetics Department - 2,000 units
 at a total cost of Rs. 1, 10, 000

## Opening stock:

Provisions Department - 400 units
Cosmetics Department - 600 units

## Sales:

Provisions Department - 900 units @ Rs. 75 per unit
Cosmetic Department - 2,100 units @ Rs. 45 per unit
Assume that Gross profit rate is uniform for both the departments.

## Solution

## Departmental Trading Account of Rama Departmental Stores <br> For the Year Ended

Dr $\quad \mathbf{C r}$

| particulars | $\begin{array}{c}\text { Provisions } \\ \text { Department } \\ \text { (Rs.) }\end{array}$ | $\begin{array}{c}\text { Cosmetic } \\ \text { Department } \\ \text { (Rs.) }\end{array}$ | Particulars | $\begin{array}{c}\text { Provisions } \\ \text { Department } \\ \text { (Rs.) }\end{array}$ | $\begin{array}{c}\text { Cosmetic } \\ \text { Department } \\ \text { (Rs.) }\end{array}$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| $\begin{array}{l}\text { To Opening Stock } \\ \text { (W.No.:6) }\end{array}$ | 20,000 | 18,000 | $\begin{array}{l}\text { By Sales } \\ \text { (W.No.:4) }\end{array}$ | 67,500 | 94,500 |
| $\begin{array}{l}\text { To Purchases } \\ \text { (W.No.:5) }\end{array}$ | 50,000 | 60,000 | $\begin{array}{l}\text { By Closing Stock } \\ \text { To Gross profit } \\ \text { (Balancing Figure) }\end{array}$ | 22,500 | 31,500 |$)$

## Working Notes

1. Calculation of closing stock (in units)

Closing stock $=$ opening stock + purchase - sales
Provisions department : $400+1000-900=500$ units
Cosmetics department : $600+2000-2100=500$ units

## 2. Calculation of rate of gross profit

Assume that all the units purchased are sold out.

## Sale proceeds:

Provisions department $=1,000$ units @ Rs. 75 each $=$ Rs. 75,000
Cosmetics department = 2,000 units @ Rs. 45 each = Rs. 90,000

> Total sale proceeds $=$ Rs. 1,65,000
> Less: Cost of the goods purchased $=$ Rs. $1,10,000$

$$
\text { Gross profit }=\text { Rs. 55,000 }
$$

Gross profit ratio $=\frac{\text { Grossprof it }}{\text { Sales }} \times 100$

$$
=\frac{R s .55,000}{R s .1,65,000} \times 100
$$

Gross profit ratio $=33.33 \%$
[if G.P ratio $=33.33 \%$ cost will be $66.67 \%$ of selling price]
3. Calculation of cost of each unit

$$
\begin{gathered}
\text { [i.e., Sales price } \times \text { Cost price] } \\
\text { Provision dept }=\text { Rs. } 75 \times \frac{66.67}{100}=\text { Rs. } 50 \\
\text { Cosmetics dept }=\text { Rs. } 45 \times \frac{66.67}{100}=\text { Rs. } 30
\end{gathered}
$$

4. Calculation of actual sale proceeds of each department [Sale units $\times$ selling price]
Provisions department $=900$ units @ Rs. 75 each = Rs. 67,500
Cosmetic department $=2,100$ units @ Rs. 45 each = Rs. 94,500
5. Calculation of purchase of each department
[units purchased $\times$ cost price]
Provisions department $=1,000$ units @ Rs. 50 each = Rs.50,000
Cosmetics department $=2,000$ units @ Rs. 30 each $=$ Rs. 60,000
6. Valuation of opening stock at cost
[opening stock units $\times$ cost price]
Provisions department = 400 units @ Rs. 50 each = Rs.20,000
Cosmetic department $=600$ units @ Rs 30 each = Rs.18,000
7. Valuation of closing stock at cost
[closing stock units $\times$ cost price]
Provision department $=500$ units @ Rs. 50 each $=$ Rs.25,000
Cosmetic department = 500 units @ Rs. 30 each = Rs. 15000

## Illustration 5

From the following particulars given by M/s. Tins and toys, prepare a Departmental Trading and profit \& loss account for their two departments. Tins department and Toys department, for the year ended $31^{\text {st }}$ December 2009.

| Particulars |  | Rs. | Particulars | Rs. |
| :--- | :--- | ---: | :--- | ---: |
| Opening Stock: | Toys | 2,500 | Packing Expenses (Toys) | 300 |
|  | Tins | 7,500 | Depreciation: |  |
| Raw Materials |  | 18,000 | Factory equipment | 1,600 |
| Consumed(Tins) |  | Building | 800 |  |
| Stores Consumed |  | 4,500 | Sales: Tins | 45,000 |
| Wages | Tins | 1,000 |  | 9,000 |
|  | Toys | 750 | Closing Stock: Toys | Toys |
| Advertisement |  |  | Tins | 6,000 |
|  |  |  | Office Expenses | 2,000 |

## Addition Information:

1. Toys are made out of end bits of raw materials used by Tins Department. The value of such material used during the year by Toys Department was Rs.1,000.
2. Toy making does not require any equipment.
3. Only $1 / 8$ of the total area of the building was occupied by Toys Department.

## Solution

## Departmental Trading and Profit and Loss Account of

M/s. Tins and Toys for the Year Ending 31 ${ }^{\text {st }}$ December, 2009

| Particulars | $\begin{aligned} & \text { Toys } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Tins } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | Particulars | $\begin{aligned} & \text { Toys } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Tins } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Opening Stock | 2,500 | 7,500 | By Sales | 9,000 | 45,000 |
| To Raw materials Consumed | - | 18,000 | By Interdepartmental Material usage [c] |  | 1,000 |
| To inter departmental Material usage[c] | 1,000 | - | By Closing Stock | 3,000 | 6,000 |
| To stores consumed (1:5) | 750 | 3,750 | By Gross Profit b/d |  |  |
| To Wages | 1,500 | 3,000 |  |  |  |
| To Gross Profit c/d | 6,250 | 19,750 |  |  |  |
|  | 12,000 | 52,000 |  | 12,000 | 52,000 |
| To Advertisement(1:5) | 125 | 625 |  | 6,250 | 19,750 |
| To Packing Expenses | 300 |  |  |  |  |
| To Office expenses(1:5) | 400 | 2,000 |  |  |  |
| To Depreciation on factory equipment | - | 1,600 |  |  |  |
| To Depreciation on Building(1:5) | 100 | 700 |  |  |  |
| To Net Profit | 5,325 | 14,825 |  |  |  |
|  | 6,250 | 19,750 |  | 6,250 | 19,750 |

## Note:

Depreciation on factory equipment is charged fully to the Tins Department as the Toys Department does not involve the usage of any equipment.

## Illustration 6

A company carries on its business through five departments viz. A, B, C, D and E. The Trial balance as on 31-12-08 is as follows:

|  | A | B | C | D | E |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | (Rs.) | (Rs.) | (Rs.) | (Rs.) | (Rs.) |
| Opening Stock | 5,000 | 3,000 | 2,500 | 4,000 | 4,500 |
| Purchases | 50,000 | 30,000 | 10,000 | 26,000 | 30,000 |
| Sales | 48,000 | 21,000 | 9,500 | 23,000 | 30,000 |
| Closing Stock | 6,000 | 4,000 | 3,500 | 3,500 | 5,500 |

The opening and closing stocks have been valued at cost. The expenses which are to be in proportion to the cost of goods sold in the respective departments are as follows:

Rs.

| Salaries and Commission | 5,510 |
| :--- | ---: |
| Rent and Rates | $\mathbf{1 , 4 5 0}$ |
| Miscellaneous Expenses | $\mathbf{1 , 3 0 5}$ |
| Insurance | $\mathbf{5 8 0}$ |

Show the final result and the percentage on sales in each department and also the com bined result with percentage on sales.

## Solution

Departmental Trading and Profit and Loss Account of.
For the Year Ended 31 ${ }^{\text {st }}$ December, 2001

| Particulars | $\begin{aligned} & \hline \text { A } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { B } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{C} \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{D} \\ & \text { (Rs.) } \end{aligned}$ | $\begin{aligned} & \hline \text { E } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | Particulars | $\begin{aligned} & \hline \text { A } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { B } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{C} \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \mathrm{D} \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { E } \\ & \text { (Rs.) } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To opening |  |  |  |  |  | By Sales | 48,000 | 21,000 | 9,500 | 23,000 | 30,000 |
| Stock | 5,000 | 3,000 | 2,500 | 4,000 | 4,500 | By Closing |  |  |  |  |  |
| To Purchases | 50,000 | 30,000 | 10,000 | 26,000 | 30,000 | Stock | 6,000 | 4,000 | 3,500 | 3,500 | 5,500 |
| To Gross Profit c/d | - | - | 500 | - | 1,000 | By Gross loss c/d | 1,000 | 8,000 | - | 3,500 | - |
|  | 55,000 | 33,000 | 13,000 | 30,000 | 35,500 |  | 55,000 | 33,000 | 13,000 | 30,000 | 35,500 |
| To Gross Loss b/d | 1,000 | 8,000 | - | 3,500 | - | By Gross Profit b/d | - | - | 500 | - | 1,000 |
| To Salaries | 1,895 | 1,121 | 348 | 1,025 | 1,121 | By Net loss | 4,041 | 9,800 | 58 | 5,146 | 800 |
| To Rent | 499 | 295 | 91 | 270 | 295 |  |  |  |  |  |  |
| To Misc. expense | 448 | 266 | 82 | 243 | 266 |  |  |  |  |  |  |
| To Insurance | 199 | 118 | 37 | 108 | 118 |  |  |  |  |  |  |
|  | 4,041 | 9,800 | 558 | 5,146 | 1,800 |  | 4,041 | 9,800 | 558 | 5,146 | 1,800 |

Net Loss $\%$ on sales $=\frac{\text { Net Loss }}{\text { Sales }} \times 100$
A $-\frac{4041}{48000} \times 100=8.42 \%$
B $-\frac{9800}{21000} \times 100=46.67 \%$

C $-\frac{58}{9500} \times 100=0.61 \%$

D- $\frac{5146}{23000} \times 100=23.37 \%$
E- $\frac{800}{30000} \times 100=2.67 \%$

## Note:

1. Ratio of cost of goods sold:

|  | A | B | C | D | E |
| :--- | :--- | :---: | :---: | :---: | ---: |
|  | (Rs.) | (Rs.) | (Rs.) | (Rs.) | (Rs.) |
| Sales | 48,000 | 21,000 | 9,500 | 23,000 | 30,000 |
| (-)Less: Gross Profit | - | - | 500 | - | 1,000 |
| (+)Add: Gross Loss | 1,000 | 8,000 | - | 3,500 | - |
|  |  |  |  |  |  |
| Cost of goods sold | 49,000 | 29,000 | 9,000 | 26,500 | 29,000 |

i.e., $\quad 490: 290: 90: 265: 100$
$98: 58: 18: 53: 58$

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