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## ACCOUNTANCY

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## Chapter - 1

## PARTNERSHIP - BASIC CONCEPTS

## Definition (Indian Partnership Act 1932, Sec 4)

"The relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all".

## Features

1. No. of members : Minimum 2 (According to partnership Act 1932)

Maximum 10 for banking business and 20 for others. (Indian companies Act 1956)
2. Agreement : Compulsory, written/oral written is not compulsory
3. Sharing of profits : In an agreed ratio or equally.
4. Management : Carried on by all or any one of them acting for all.
5. Purpose : To conduct a lawful business.

## Partnership Deed / Articles of Partnership

Written agreement between partners is called partnership deed.

## Main Contents

1. Name of the firm
2. Names \& Addresses of partners.
3. Capital contribution
4. Sharing of profit
5. Interest on drawings \& capital etc.

In the absence of Partnership Deed

1. Sharing of profit - Equally
2. Interest on capital - No interest on Capital
3. Interest on drawings - No interest on drawings
4. Interest on loan - 6\% p.a
5. Salary/commission - No Salary/Commission

## P \& LAppropriation Account

It is a nominal account prepared to show the distribution of net profit or net loss among the partners.

## Format of a P\&LAppropriation Account

Dr.
P\&LAppropriation A/c.
Cr .

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| P\&LA/c | xxxx | P\&LA/c | xxxx |
| (Net loss, if any) |  | (Net profit) |  |
| Interest on capital |  | Interest on Drawings |  |
| A - xxx |  | A- xxx |  |
| B-xxx | xxxx | B- xxx | xxxx |
| Partner's Salary | xxxx | Capital A/c |  |
| Partner's Commission | xxxx | (Share of loss) |  |
|  |  | A-xxx |  |
|  |  | B-xxx | xxxx |
| Capital A/c <br> (Share of profit) |  |  |  |
|  |  |  |  |
| A-xxx |  |  |  |
| B-xxx | xxxx |  |  |
|  | xxxx |  | xxxx |

## Illustration

On 1st January 2012 A and B entered into partnership by contributing Rs. 40000 and Rs. 30000 respectively. Their profit sharing ratio was $3: 2$. A is entitled to get a salary of Rs. 3000 per year and B is entitled a commission of Rs. 5000. Interest on capital is allowed @ $10 \%$ p.a and interest on drawings was charged @ 12\% p.a. Their drawings during the year 2012 were A, Rs. 10000 and B Rs. 5000. The profit made by the firm during 2012 before making above adjustments were Rs. 24000.

## Solutions :

Profit \& Loss Appropriation A/c.

| Particulars | Rs. | Particulars | Rs. |
| :---: | :---: | :---: | :---: |
| Interest on capital <br> A-4000 <br> B- 3000 <br> A's Salary <br> B's Commission <br> Profit transfered to <br> CapitalA/c (Balancing figure) $\text { A - } 6480$ $\text { B - } 4320$ | $\begin{aligned} & 7000 \\ & 3000 \\ & 5000 \\ & \\ & 10800 \end{aligned}$ | P \& LA/c <br> Interest on Drawings $\begin{aligned} & \text { A }-1200 \\ & \text { B - } \quad 600 \\ & \hline \end{aligned}$ | $24000$ $1800$ |
|  | 25800 |  | 25800 |

## Capital Accounts of Partners

1. Fixed Capital method
2. Fluctuating Capital Method

| Fixed Capital Method | Fluctuating Capital Method |
| :--- | :--- |
| 1. Two Accounts are prepared | 1. Only one $\mathrm{A} / \mathrm{c}$ is prepared <br> i.e capital $\mathrm{A} / \mathrm{c}$. |
| ie capital $\mathrm{A} / \mathrm{c} \&$ current $\mathrm{A} / \mathrm{c}$. | 2. Balance in capital A/c fluctuates. |
| 2. Balance in capitalA/c remains the same | 3. All adjustments are made in the |
| 3. All adjustments like interest or capital, |  |
| interest on drawings etc are made in current $\mathrm{A} / \mathrm{c}$. <br> capitalA/c. itself. |  |
| 4.Both the capital \& current $\mathrm{A} / \mathrm{c}$ balance <br> appears in the balance sheet. | 4. Only capital $\mathrm{A} / \mathrm{c}$ balance appears <br> in the balancesheet. |

## I. Format of Fixed Capital A/c method

Dr.
CapitalA/c
Cr .

| Particulars | A <br> Rs. | B <br> Rs. | Particulars | A <br> Rs. | B <br> Rs. |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Cash <br> (capital withdrawn if any) | xx | xx | Balance b/d |  |  |
| cash |  | xxx | xxx |  |  |
| Balance c/d | xxx | xxx |  | xx | xx |
|  | xxxx | xxxx |  | xxxx | xxxx |

## Current A/c

| Particulars | A | B | Particulars | A | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Drawings | Xxx | Xxx | Balance b/d (opening balance) <br> Interest on capital <br> Salary <br> Commission <br> P\&LAppropriation A/c <br> (share of profit) | xxxx | XxX |
| Interest on drawings | Xxx | Xxx |  |  |  |
| P\&Lappropriation $\mathrm{A} / \mathrm{c}$ | Xxx | Xxx |  | xxx | Xxx |
| (share of loss, if any) |  |  |  | xxx | xxx |
| Balance c/d |  |  |  | Xxx | xxx |
|  |  |  |  | xxx | xxx |
|  | Xxxx | Xxxx |  |  |  |
|  | xxxx | Xxxx |  | Xxxx | Xxxx |

## II. Format of fluctuating capital a/c method

## CapitalA/c

| Particulars | A | B | Particulars | A | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Drawings | xxxx | xxxx | Balance b/d or cash <br> Interest on capital <br> Salary <br> Commission <br> P\&LAppropriationA/c <br> (share of profit) | xxxx | xxx |
| Interest on drawings | xxxx | xxxx |  | xxx | xxx |
| P\&LAppropriation A/c |  |  |  | xxx | xxx |
| (share of loss, if any) | xxxx | xxxx |  | xxx | xxx |
|  |  |  |  | xxx | xxx |
| balance c/d | xxxx | xxxx |  |  |  |
|  | xxxx | xxxx |  | xxxx | xxxx |

By using the above illustration we can prepare capitalA/cs under fixed \& fluctuating methods which will appear as follows

## I Fixed Capital Method

## CapitalA/c.

| Particulars | A | B | Particulars | A | B |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Balance c/d |  |  | Cash | 40000 | 30000 |
|  | 40000 | 30000 |  |  |  |
|  | 40000 | 30000 |  | 40000 | 30000 |

## Current A/c

$\left.\begin{array}{|l|r|r|l|r|r|}\hline \text { Particulars } & \text { A } & \text { B } & \text { Particulars } & \text { A } & \text { B } \\ \hline \text { Drawings } & 10000 & 5000 & \text { Balance b/d } & - & - \\ \text { Interest on Drawings } & 1200 & 600 & & \begin{array}{l}\text { Interest on capital } \\ \text { Salary }\end{array} & 4000\end{array}\right) 3000$

## II. Under fluctuating Capital Method

| Particulars | A | B | Particulars | A | B |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Drawings | 10000 | 5000 | Cash | 40000 | 30000 |
| Interest on Drawings | 1200 | 600 | Interest on Capital | 4000 | 3000 |
|  |  |  | Salary | 3000 | - |
| Commission | - | 5000 |  |  |  |
| Balance c/d |  |  | P\&LAppropriationA/c <br> (share of profit) | 6480 | 4320 |
|  | 42280 | 36720 |  |  |  |
|  | 53480 | 42320 |  | 53480 | 42320 |

## Interest on Drawings : Calculation

$$
\text { Interest on Drawings }=\text { Total Drawings } \times \frac{\text { Rate }}{100} \times \frac{\text { Period }}{12}
$$

1. Fixed amount withdrawn at

$$
\text { the beginning of every month }=\text { Total Drawings } \times=\frac{\text { Rate }}{100} \times \frac{6.5}{12}
$$

2. Fixed amount withdrawn at the

$$
\text { end of every month } \quad=\text { Total Drawings } \times=\frac{\text { Rate }}{100} \times \frac{5.5}{12}
$$

3. Fixed amount withdrawn in the

$$
\text { middle ofevery month } \quad=\text { Total Drawings } \times=\frac{\text { Rate }}{100} \times \frac{6}{12}
$$

## Goodwill

Present value of a firm's anticipated excess earnings.

## Factors affecting goodwill

1. Location
2. Nature of Business
3. Efficiency of management
4. Age of the firm
5. Monopoly
6. Special Advantages.

## Methods of valuation of goodwill

## 1. Average Profit Method

Goodwill $=$ Average profit $\times$ No. of years purchase

Average profit $=\frac{\text { Total profit }}{\text { No. of years }}$

## Example for Average Profit Method

Calculate goodwill on the basis of 2 year's purchase of the 3 years average profit.

| Year | Profit |
| :--- | :--- |
| 2000 | 30000 |
| 2001 | 40000 |
| 2002 | 20000 |

## Solution

Average profit $=\frac{\text { Total profit }}{\text { No. of years }}=\frac{30000+40000+2000}{3}=30000$
Goodwill $=2$ years purchase of 3 years Avg Profit
$=2 \times 30000=60000 /-$

## 2. Super Profit Method

Super Profit equals Excess of actual average profit over normal or standard profit
Super Profit = Actual Avg Profit - Normal Profit

## Need to identify or calculate

1. Average Profit
2. Normal Profit
3. Super Profit
4. Goodwill by multiplying the super profit with no. of year purchase, same as average profit method of goodwill.

## Example for super profit method

Calculate good will on the 2 years purchase of the super profit.
Profit for the last 3 years

| Year | Profit |
| :--- | :--- |
| 2000 | 30000 |
| 2001 | 40000 |
| 2002 | 20000 |

The capital employed in the firm is 150000 , Normal rate of return on the capital is $10 \%$

## Solutions

Need to calculate (1) Avg Profit, (2) Normal Profit, (3) Super Profit, then (4) Goodwill

1. Average Profit $=\frac{\text { Total profit }}{\text { No. of Year }}=\frac{30000+40000+20000}{3}$

$$
=30000
$$

2. Normal Profit $=$ Capital employed $x$ Normal rate of return

$$
=150000 \times 10 \%=15000
$$

3. Super Profit $=$ Average Profit - Normal Profit

$$
=30000-15000
$$

$$
=15000
$$

Goodwill $\quad=$ Super Profit $\times$ No. of Years Purchase
$=15000 \times 2=30000$

## 3. Capitalisation Method

Under this method goodwill may be calculated
A. Capitalising the average profit
B. Capitalising the super profit.

## A. Capitalisation of Average Profits

In this the good will is calculated as follows
Goodwill = Capitalized value of Average Profit - Net Tangible Assets.

## Need to Calculate

1. Average Profit
2. Net Tangible Assets (Total Asset - Liabilities)
3. Capitalised value of Average Profit

$$
=\text { Average Profit } \times \frac{100}{\text { Normalrateofreturn }}
$$

4. Goodwill

## Example

Calculate good will from the following
Profit for the last 3 years

| Years | Profit |
| :--- | :--- |
| 2000 | 30000 |
| 2001 | 40000 |
| 2002 | 20000 |

Total Assets worth Rs. 250000, Liabilities Rs. 75000, Normal rate of return of business is $10 \%$.

## Solutions

Need to calculate

1) Average Profit
2) Net Tangible Assets
3) Capitalised value of average profit
4) Goodwill

Average Profit $=\frac{\text { Total profit }}{\text { No. of Year }}=\frac{30000+40000+20000}{3}=30000$
Net Tangible Assets $=250000-75000=175000$
Capitalised value of average profit $=30000 \times \frac{100}{10}=300000$
$\therefore$ goodwill $=300000-175000=125000$

## B. Capitalisation of Super Profit

Need to calculate

1) Average Profit
2) Net Tangible Assets
3) Normal Profit
4) Super Profit
5) Goodwill $=$ Sper Profit $\times \frac{100}{\text { Normal rate of return }}$

## Example

Profit for the last 3 years

| Years | Profit |
| :--- | :--- |
| 2000 | 30000 |
| 2001 | 40000 |
| 2002 | 20000 |

Total Assets worth Rs. 250000, Liabilities Rs. 75000, Normal rate of return of business is $10 \%$..

## Solutions

Need to Calculate

1) Average Profit
2) Net tangible Assets
3) Normal Profit
4) Super Profit
5) Goodwill

Average Profit $\quad=30000$
Net Tangible Asset $=175000$
Normal Profit $\quad=175000 \times 10 \%=175000$
Super Profit $\quad=30000-17500=12500$
Goodwill $\quad=12500 \times \frac{10}{1000}=125000$

## Chapter - 2

## ADMISSION OF A PARTNER

A new partner is admitted in an existing firm is called admission of a partner.
New partner gets two rights

1. Share in Assets: Need to bring capital
2. Share in Profits : Need to bring goodwill

Share of goodwill in cash is called - Premium
What are the adjustments required at the time of admission of a new partner?

1. Calculation of New Profit Sharing Ratio
2. Calculation of Sacrificing Ratio
3. Adjustment of Goodwill
4. Revaluation of Assets and Liabilities
5. Sharing of reserves and accumulated Profits.
6. CapitalAdjustments.

## Profit Ratios

Old Ratio ( $\mathrm{O} / \mathrm{R}$ ) : Profit sharing ratio of existing partners (Old Partners) before admission.
New Ratio (N/R) : Profit sharing ratio of all partners after admission.
Sacrificing Ratio (S/R) : Old Ratio - New Ratio = O/R - N/R

## Problems and Solutions

A and B are partners sharing profit in the ratio of 3:2. Their balance sheet as on $31 / 12 / 2005$ were as follows.

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| S. Creditors | 5000 | Cash | 10000 |
| Reserve | 15000 | Debtors | 3500 |
| A's Capital | 30000 | Stock | 6000 |
| B's Capital | 10000 | Buildings | 17500 |
|  |  | Furniture | 18000 |
|  |  | Profit \& Loss A/c | 5000 |
|  | 60000 |  | 60000 |

C is admitted as new partner with $1 / 6$ th share with the following conditions:

1. C will bring Rs. 25000 as capital
2. C will bring Rs. 8000 for his share of goodwill
3. The value of stock increased by Rs. 1000
4. Buildings revalued at Rs. 20000
5. There is a claim for outstanding bill for Rs. 500

Prepare 1) RevaluationA/c.
2) Capital $\mathrm{A} / \mathrm{c}$.
3) Balance sheet.

## Here students can adopt the following steps to solve the problem:

1. Calculation of new ratio
2. Calculation of sacrificing ratio
3. Preparation of revaluation $\mathrm{A} / \mathrm{c}$
4. Transfer the Re-valuation profit or loss to capital
5. Prepare Capital A/c
6. Prepare Balance sheet.

## Solution :

## 1) Calculation of New Ratio (N/R)

Old ratio of A \& B: 3:2 or 3/5:2/5
Total share $=1$
C's share $=1 / 6$
Balance share for $\mathrm{A} \& \mathrm{~B}=$ Total - C's share i.e.,

$$
=1-1 / 6=5 / 6
$$

A's new share $=5 / 6 \times 3 / 5=15 / 30$
B's new share $=5 / 6 \times 2 / 5=10 / 30$
C's share $=1 / 6$ or $\rightarrow 5 / 30$
(To convert $1 / 6$ th in to new share, multiply both numerator and denominator by same factor) ie, $1 / 6 \times 5 / 5=\frac{1 \times 5}{6 \times 5}=\frac{5}{30}$

New Ratio of A, B \& C = 3:2:1

## 2. Calculation of Sacrificing Ratio ( $\mathbf{S} / \mathbf{R}$ )

Sacrificing ratio : Old Ratio -New Ratio
Old Ratio of A \& B = 3:2
New Ratio ofA, B, C = 3:2:1
A's $S / R=3 / 5-3 / 6=\frac{18-15}{30}=\frac{3}{30}$
B's $\mathrm{S} / \mathrm{R}=2 / 5-2 / 6=\frac{12-10}{30}=\frac{2}{30}$

$$
\mathrm{S} / \mathrm{R}=3: 2
$$

## 3. Preparation of Revaluation $A / \mathbf{c}$

Revaluation $\mathrm{A} / \mathrm{c}$

| To claim for O/S bill <br> A: <br> B: |  | 500 | By Stock <br> By Buildings | 1000 <br> 2500 |
| :--- | :--- | :---: | :--- | :--- |
|  | 1200 |  |  |  |

CAPITAL A/C

|  | A | B | C |  | A | B | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To P\&LA/c (O/R) | 3000 | 2000 | - | Balance b/d <br> By Cash <br> By Cash (Good will) (S/R) <br> By Reserve (O/R <br> By Revaluation (O/R) | 30000 | 10000 | - |
|  |  |  |  |  |  |  | 25000 |
|  |  |  |  |  | 4800 | 3200 |  |
|  |  |  |  |  | 9000 | 6000 |  |
|  |  |  |  |  | 1800 | 1200 |  |
| To Balance C/d | 42600 | 18400 | 25000 |  |  |  |  |
|  | 45600 | 20400 | 25000 |  | 45600 | 20400 | 25000 |

Balance sheet of A, B \& C

| LIABILITIES | RS | ASSETS | RS |
| :--- | ---: | :--- | ---: |
| S. Creditors | 5000 | Cash $(10000+25000+8000)$ | 43000 |
| O/S repair bill | 500 | Debtors | 3500 |
| A's Capital | 42600 | Stock $(6000+1000)$ | 7000 |
| B's Capital | 18400 | Building $(17500+2500)$ | 20000 |
| C's Capital | 25000 | Furniture | 18000 |
|  | 91500 |  | 91500 |

## Some tips to solve problems

## 1. Calculation of new ratio and Sacrificing Ratio

If there is no capital adjustment is given in question students need not calculate new ratio, only sacrificing ratio will be calculated for distribution of goodwill to old partners. So sacrificing ratio can be taken in following cases as:

| SI. No | Cases | Sacrificing Ratio |
| :--- | :--- | :---: |
| 1. | A and B are partners 3:2 (old ratio) C is admitted with 1/6th <br> share calculate S/R | $3: 2$ <br> $\mathrm{O} / \mathrm{R}=\mathrm{S} / \mathrm{R}$ |
| 2. | A,B are partners in the ratio of 3:2 C is admitted as new partner with <br> $1 / 6$ th share that he acquire equally from A \& B, calculate S/R | $1: 1$ |
| 3. | A,B are partners in the ratio of 3:2 C is admitted as new partner <br> who acquire $1 / 15$ fromA and $2 / 15$ from B | $1: 2$ |
| 4. | But ifold ratio and new ratio are given the sacrificing ratio should <br> be calculated | $1: 2$ <br> $\mathrm{O} / \mathrm{R}-\mathrm{N} / \mathrm{R}$ |

II. While preparing revaluation account the following points should be noted:

1. Revaluation $\mathbf{A} / \mathbf{c}$

| Particulars | Amount | Particulars | Amount |
| :--- | :---: | :--- | :---: |
| Decreased value assets | xxx | Increased value of asset | xxx |
| increased |  | Decreased value of | xxx |
| value ofliability | xxx | Liability |  |

2. Revaluation profit should be credited to capital account of old partner in $O / R$.
3. Revaluation losses should be debited to capital account of old partners in $\mathrm{O} / \mathrm{R}$.

## The provision for doubtful debts in revaluation account.

I. Balance sheet before admission

| Liabilities | Rs | Assets | Rs. |
| :--- | :--- | :--- | :--- |
|  |  | Debtors | 50000 |

(i) Provide 5\% provision in doubtful debts on debtors

Dr. Revaluation A/c
Cr.

| To Provision | 2500 |  |  |
| :--- | :--- | :--- | :--- |

Note: Provision should be treated as liability in this case. So increase of provision should be debited and decrease should be credited.

## II. Balance sheet before admission

|  |  | Debtors <br> Less Provision <br> L0000 | 48000 |
| :--- | :--- | :--- | :--- |

Provide 5\% provision on debtors:

## Revaluation A/c

| To provision | 500 |  |  |
| :--- | :--- | :--- | :--- |

III. Balance Sheet before admission


Provision for doubtful debts is to be $2 \%$ on debtors.

## Revaluation A/c

|  |  | Provision | 1000 |
| :--- | :--- | :--- | :--- |

From the above case No.III if adjustment is given as:

## Preparation of Capital Account

Distribution of Reserve and Profit and Loss Account:

Balance Sheet before admission

| LIABILITIES | RS. | ASSET | RS. |
| :--- | :--- | :--- | :--- |
| Reserve | 5000 | P\&LAccount | 10000 |

CapitalA/c

|  | Old Partner | Old Partner | New |  | Old | Old | New |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| P\&LA/c | 6000 | 4000 | - | Reserve | 3000 | 2000 | - |

## Treatment of goodwill

Students are advised to write journal entry before preparing capital account.

1. When new partner brings the amount of goodwill in cash: Journal will be

Cash $\qquad$ Dr.

To old partners capital a/c.
2. When new partner does not bring amount goodwill in cash.

New partner capital Dr.
To old partner's capital A/c.

## Goodwill will be distributed to S/R Ratio - Tips for preparing balance sheet after admission

1. Write cash balance on asset side.
(old cash balance + new partners capital + New partner's goodwill)
2. Write other items in increased or decreased value.
3. Don't write general reserve and profit \& loss account in new balance sheet.

## Chapter - 3

## RETIREMENT OF A PARTNER

## 1. Retirement

A partner may wish to withdraw from a firm for various reasons like old age, change of residence, on health ground etc. It means to leave the firm.

2 Types of Retirement / ways in which a partner can retire.

1) With the consent of all the other partners
2) In accordance with an express agreement
3) Giving notice by a partner.

## 3. Adjustments required at the time of retirement

1) Adjustment regarding profit sharing ratio
2) Adjustment for goodwill
3) Adjustment for joint life policy
4) Revaluation of assets and reassessment of liabilities.
5) Adjustments regarding reserves and undistributed profit or loss.
6) Capital adjustment of remaining partners.
7) Payment to the retiring partner.

## 4. New profit sharing ratio of remaining partner.

a) Gain share is not given -

Then new profit sharing ratio of the remaining partners will be found out by striking out the share of the retiring partner.
Eg: A, B and C are partners sharing profits in the ratio of 5:3:2. Calculate new profit sharing ratio.

1) A retires,
2) B retires
3) C retires

Answer

1) If A retires, $B$ 's and $C$ 's new ratio will be $3: 2$ (ie $5: 3: 2$ )
2) If B retires, A's and C's new ratio will be $5: 2$ (ie $5: 8: 2$ )
3) If C retires A's and B's new ratio will be $5: 3$ (ie $5: 3: 2$ )
b) Gain share is given:

Eg: A, B and C were partners in a firm sharing profits in the ratio of 5:4:3. B retires and his share was divided equally between $\mathrm{A} \& \mathrm{C}$. Calculate the new profit sharing ratio and A and C .
i) Calculation of gain share

A takes share of $B=\frac{1}{2} \times \frac{4}{12}=\frac{4}{24}=\frac{1}{6}$
$C$ takes share of $B=\frac{1}{2} \times \frac{4}{12}=\frac{4}{24}=\frac{1}{6}$
ii) Calculation of new profit sharing ratio.

New share $=$ Old + Gain
A's new share $=\frac{5}{12}+\frac{1}{6}=\frac{5+2}{12}=\frac{7}{12}$
C's new share $=\frac{3}{12}+\frac{1}{6}=\frac{3+2}{12}=\frac{5}{12}$
New profit sharing ratio of $A$ and $C=7: 5$

## 5. Gaining ratio

The ratio in which the continuing partners have acquired the share from outgoing partner is called gaining ratio or benefit ratio.
Gaining ratio $=$ New Ratio - Old Ratio

## Calculation of gaining ratio

## i. New ratio is not given

$\mathrm{X}, \mathrm{Y}$ and Z are partners in a firm sharing profits and losses in the ratio of $4: 3: 1$. Calculate gaining ratio when (i) A retires (ii) B retires and (iii) C retires.

## Answer:

i. When A retires, $\mathrm{B} \& \mathrm{C}$ 's gaining ratio $=3: 1$
ii. When B retires, $\mathrm{A} \& \mathrm{C}$ 's gaining ratio $=4: 1$
iii. When $C$ retires, $A \& B$ 's gaining ratio $=4: 3$

## ii. New ratio is given

$\mathrm{A}, \mathrm{B} \& \mathrm{C}$ are partners sharing profit and loss in the ratio of 15:9:8 respectively. C retires and $\mathrm{A} \& \mathrm{~B}$ decided to share profits in equal proportion. Calculate gaining ratio.

## Solution

Gaining ratio $=$ New ratio - Old ratio
A's gain $=\frac{1}{2}-\frac{15}{32}=\frac{16-15}{32}=\frac{1}{32}$

B's gain $=\frac{1}{2}-\frac{9}{32}=\frac{16-9}{32}=\frac{7}{32}$
$\therefore$ Gaining ratio $=1: 7$

## iii. Gaining ratio expressly given

$\mathrm{A}, \mathrm{B}$ and C are partners sharing profits in the ratio of 3:2:1. A retires and his share acquired by B and C in the ratio of 3:2. Calculate new ratio and gaining ratio.

## Solution:

B's gain $=\frac{3}{5}$ of $\frac{3}{6}=\frac{9}{30}$
$C^{\prime}$ 's gain $=\frac{2}{5}$ of $\frac{3}{6}=\frac{6}{30}$
$\therefore$ Gaining ratio $=9: 6=3: 2$

## New Ratio

B's new share $=\frac{2}{6}+\frac{9}{30}=\frac{10}{30}+\frac{9}{30}=\frac{19}{30}$

C's new shre $=\frac{1}{6}+\frac{6}{30}=\frac{5}{30}+\frac{6}{30}=\frac{11}{30}$
$\therefore$ New share of $B \& C=19: 11$
6. Difference between sacrificing ratio and gaining ratio

| Sacrificing ratio | Gaining ratio |
| :--- | :--- |
| a) The ratio in which old partners <br> sacrifice a part of their profit <br> infavour ofnew partner. | a) The ratio in which continuing partners <br> have acquired the share from the <br> outgoing partner. |
| b) It is calculated at the time of <br> admission | b) It is calculated at the time of retirement or <br> death. |
| c) Old Ratio - New Ratio | c) New Ratio - Old Ratio |

## 7. Entry for the treatment of goodmill

Gaining partner's/Remaining patner's capital. $\qquad$ Dr.

Retiring / deceased partner's capital $\mathrm{A} / \mathrm{c}$.

## 8. Revaluation $\mathbf{A} / \mathrm{c}$

| Dr. |  | Revaluation A/c |  |
| :---: | :---: | :---: | :---: |
| Decrease in Assets | xxxx | Increase in Assets | xxxx |
| Increase in Liabilities | xxxx | Decrease in Liabilities | xxxx |
| Provision for doubtful debts | xxxx | Unrecorded Assets | xxxx |
| Unrecorded liabilities | xxxx | Loss (if any) |  |
| Profit transferred to partner's |  | transferred to partner's |  |
| capitala/c | xxxx | captiala/c. | xxxx |
|  | xxxxx |  | xxxxx |

## Treatment of Reserves, General reserves, Reserve Fund, P\&L (in the liability side) etc.

a) Reserve $\mathrm{A} / \mathrm{c}$. Dr
General Reserve A/c..............Dr
P\&LA/c............................. Dr
All Partner's capital A/c.
(Distributed among all partners in their old ratio)
Dr.

|  | Partner's CapitalA/c | Cr. |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Particulars | X | Y | Particulars | X | Y |
|  |  |  | Reserve/General Reserve <br> /P\&LA/c etc |  |  |
|  |  |  |  | xxx | xxx |
|  |  |  |  |  |  |

b) P\&L in the Asset side (i.e. Accumulated loss)

Partner's capital A/c. $\qquad$ Dr.
P\&LA/c
Dr.
Partners' Capital A/c.
Cr .

| Particulars | X | Y | Particulars | X | Y |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{P} \& \mathrm{~L}$ | xxx | xxx |  |  |  |
|  |  |  |  |  |  |

10. Settlement of retiring partner's capital $\mathrm{A} / \mathrm{c}$.
a) Ifbalance paid immediately

Retiring partner's capital $\mathrm{A} / \mathrm{c}$ Dr
Cash/Bank
b) If the amount transferred to Loan $\mathrm{A} / \mathrm{c}$

Retiring partne'rs capital $\mathrm{A} / \mathrm{c}$. Dr
Retiring Partner's Loan $\mathrm{A} / \mathrm{c}$.

## 11. Adjustment of capital $\mathbf{a} / \mathrm{c}$. of remaining partners

a) if there is any excess capital (ie if credit side of the partner's capital is more than the debit side of the capital $\mathrm{A} / \mathrm{c}$ )

$$
\begin{aligned}
& \text { Partner's Capital A/c.....................Dr. } \\
& \text { Cash }
\end{aligned}
$$

b) If there is any deficit capital (ie debit side of capital $\mathrm{A} / \mathrm{c}$ is more than the credit side)

Cash A/c. $\qquad$ Dr.
Partner's captial A/c.

## 12. A comprehensive problem from Retirement chapter

The balance sheet of AB and C who were sharing the profits in proportion to their capitals stood as on 31 march 2011

Balancesheet of A, B \& C as on 31-3-2011

| Liabilities | Rs. | Assets | Rs. |
| :--- | ---: | :--- | ---: |
| Bills Payable | 6250 | Factory Building | 12000 |
| Sundry Creditors | 10000 | Sundry Debtors | 10000 |
| Reserve Fund | 2750 | Bills Receivable | 7000 |
| Capitals: |  | Stock | 15500 |
| A -20000 |  | Plant \& Machinery | 11500 |
| B -15000 |  | Bank Balance | 13000 |
| C -15000 | 50000 |  |  |
|  | 69000 |  | 69000 |

$B$ retired on the date of balance sheet and the following adjustments were made:
a) Stock was depreciated by $10 \%$
b) Factory building were appreciated by $12 \%$
c) Reserve for doubtful debts be created upto $5 \%$
d) Reserve for legal charges to be made at Rs. 265
e) The goodwill of the firm fixed at Rs. 10000
f) The capital of the new firm be fixed at Rs. 30000

The continuing partners decide to keep their capitals in the new profit sharing ratio of 3:2
Pass journal entries and prepare the new balancesheet of reconstituted firm after transfering the balance in B's capital $\mathrm{A} / \mathrm{c}$ to his loan $\mathrm{A} / \mathrm{c}$.

## Solution:

a) Gaing ratio
old ratio $=20000: 15000: 15000$

$$
\begin{array}{lllll}
=20 & : & 15 & : & 15 \\
=4 & : & 3 & : & 3
\end{array}
$$

New ratio $=3: 2$
$\therefore$ Gaining ratio $=$ New ratio - Old ratio

$$
\begin{array}{ll}
\mathrm{A}^{\prime} \mathrm{s} / \mathrm{R} & =\frac{3}{5}-\frac{4}{10}=\frac{6-4}{10}=\frac{2}{10} \\
\mathrm{C}^{\prime} \mathrm{s} \text { G/R } & =\frac{2}{5}-\frac{3}{10}=\frac{4-3}{10}=\frac{1}{10}
\end{array}
$$

$\therefore \mathrm{G} / \mathrm{R}$ of $\mathrm{A} \& \mathrm{C}=2: 1$
Journal of A, B \& C

| Date | Particulars | L/F | Debit | Credit |
| :---: | :---: | :---: | :---: | :---: |
|  | RevaluationA/c..........Dr |  | 2315 |  |
|  | Stock |  |  | 1550 |
|  | Reserve for doubtful debts |  |  | 500 |
|  | Reserve for legal charges |  |  | 265 |
|  | (Decrease in the value of assets, un recorded liabilities) |  |  |  |
|  | Factory Buildings A/c.........Dr |  | 1440 |  |
|  | Revaluation A/c |  |  | 1440 |
|  | A's Capital A/c. .................Dr. |  | 350 |  |
|  | B's Capital A/c..................Dr. |  | 263 |  |
|  | C's Capital A/c.................Dr. |  | 262 |  |
|  | Revaluation A/c. <br> (Transfer of Revaluation loss to |  |  | 875 |
|  | Capital in the ratio of 4:3:3) |  |  |  |
|  | Reserve Fund A/c..............Dr. |  | 2750 |  |
|  | A's Capital A/c |  |  | 1100 |
|  | B's Capital A/c |  |  | 825 |
|  | C's Capital A/c |  |  | 825 |
|  | (Distribution of Reserves) |  |  |  |
|  | A's Capital A/c.................Dr. |  | 2000 |  |
|  | B's Capital A/c................Dr. |  | 1000 |  |
|  | B's Capital A/c |  |  | 3000 |
|  | (B's share of goodwill borne by |  |  |  |
|  | A\&C ie $10000 \times 3 / 10=3000$ ) |  |  |  |


|  | A/s CapitalA/c.................Dr. <br> C's CapitalA/c.................Dr. <br> Cash <br> (Excess capital withdraw by A\&C) |  | 750 |
| :--- | :--- | ---: | :---: |
| B's CapitalA/c..............Dr. <br> B's Loan A/c <br> (Transfer B's balance to his loan a/c) | 2563 | 3313 |  |

## Revaluation A/c

Dr.

| Cr. |  |  |  |
| :--- | :---: | :--- | :---: |
| Particulars | Amount | Particulars | Amount |
| Stock | 1550 | Factory Building | 1440 |
| Reserve for doubful debts | 500 | Loss transferred to |  |
| Reserve for legal charges | 265 | A's capital A/c 350 |  |
|  |  | B's Capital A/c 263 |  |
|  |  | C's capital A/c. 262 |  |
|  |  | (ie in the ratio of 4:3:3) | 875 |
|  |  |  | 2315 |

CapitalA/c

| Dr. ${ }^{\text {cr }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | A | B | C | Particulars | A | B | C |
| Revaluation loss | 350 | 263 | 262 | Balance b/d | 20000 | 15000 | 15000 |
| B's Capital A/c | 2000 |  | 1000 | Reserve Fund | 1100 | 825 | 825 |
| B's Loan A/c |  | 18562 |  | A's Capital A/c |  | 2000 |  |
| Cash | 750 |  | 2563 | C's Capital A/c |  | 1000 |  |
| Balance c/d <br> (Shared 30000 in the <br> ratio of 3:2) | 18000 |  | 12000 |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | 21100 | 18825 | 15825 |  | 21100 | 18825 | 15825 |

Balance sheet of A and C

| Liabilities | Amount | Assets | Amount |
| :--- | ---: | :--- | ---: |
| Bills Payable | 6250 | FactoryBuilding | 13440 |
| Reserve for legal charges | 265 | Sundry Debtors | 9500 |
| Creditors | 10000 | Bills Receivables | 7000 |
| B's Loan A/c | 18562 | Stock |  |
| Capital A/c |  | Less. Decreciation 1550 | 13950 |
| A's -18000 |  | Planth \& Machinary | 11500 |
| C's - 12000 | 30000 | Bank Balance | 9687 |
|  | $(13000-3313)$ | 65077 |  |

13. Partners' Loan $\mathrm{A} / \mathrm{c}$

## Partners' Loan A/c

$\mathrm{Dr} \quad \mathrm{Cr}$

| Particulars | Amount | Particulars | Amount |
| :---: | :---: | :---: | :---: |
| Cash <br> (Instalment + interest) | xxxx | Retiring partners' Capital $\mathrm{A} / \mathrm{c}$ (total amount of Loan) | xxxx |
|  |  | Balance b/d | xxxx |
| Balance c/d | xxxx |  | xxxx |
|  | xxxx |  |  |
| Cash <br> (Instalment + integration) <br> Balance c/d | xxxx |  |  |
|  |  | Balance b/d | xxxx |
|  | xxxx |  | xxxx |

One instalment amount $=\frac{\text { Total Loanamount }}{\text { No. of instalments }}$
Interest Calculation $=$ Balance b/d amount $\times \frac{\text { Rate }}{100}$

## 14. Death of a partner

Amount payable to deceased partner.
Deceased partner's capital A/c

| Dr. |
| :--- |
| Particulars Amount Particulars Amount <br> Share in accumulated loss xxxx Opening Capital(balance b/d) xxxx <br> Share in revaluation loss xxxx Interest on capital xxxx <br> Drawings xxxx Remuneration xxxx <br> Interest on drawings xxxx Share of reserve fund xxxx <br> Share of loss upto the xxxx Share in goodwill xxxx <br> the date of death  Share in revaluation profit  <br> Deceased partner's  upto the date of death xxxx <br> Executors A/c xxxx Share in JLP xxxx |

Share of profits/loss upto the date of death
$=$ Previous year profit/Avg. profit $=\frac{\text { No.of months upto death }}{12} \times \begin{aligned} & \text { Share of } \\ & \text { deceased partner }\end{aligned}$

## TIPS

1) Only one entry for goodwill adjustment, ie Remaining partner's capital $\mathrm{A} / \mathrm{c}$. Dr. Retiring partner's capital a/c
2) In Revaluation $\mathrm{A} / \mathrm{c}$

Debit - Depreciation, Provisions, Overvalued assets, Unrecorded Liabilities.
Credit - Appreciation, Undervalued assets, Unrecorded assets.
3) Closing capital balance (ie balance $c / d$ in capital $\mathrm{A} / \mathrm{c}$ ) required to remaining partner's only.
4) Retiring partner's capital $\mathrm{A} / \mathrm{c}$ 's debit side should show either cash or loan $\mathrm{A} / \mathrm{c}$
5) In capital adjustment, divide total capital by new ratio among remaining partners and write this amount in the capital $\mathrm{A} / \mathrm{c}$ as 'balance $\mathrm{c} / \mathrm{d}$ ', then balance credit and debit side to find out which side is more.

If debit side is more, write cash in the credit side and if credit side is more write cash in the debit side of capital $\mathrm{A} / \mathrm{c}$ of remaining partners.
6) Retiring partners share of goodwill

Total/Firms' goodwill $\times$ Share of retiring partner.
7) In the case of death, profit upto the date of death is to be written in the deceased partner's credit side as 'P\&L Suspense $\mathrm{A} / \mathrm{c}$. This item P \& L Suspense $\mathrm{A} / \mathrm{c}$. also to be shown in the Asset side of Balance Sheet.

## Chapter - 4

## DISSOLUTION OFA PARTNERSHIP FIRM

As per EDUMATE guidelines one question having 6 score is expected from this chapter.

## Important Points:

1. Dissolution of partnership firm means complete close down of the business.
2. Dissolution between all the partners of a firm is called dissolution of the firm
3. There are 5 types of dissolution of a firm. Such as
a) Dissolution by agreement
b) Compulsory Dissolution
c) Dissolution on contingencies
d) Dissolution by notice
e) Dissolution by court.
4. Dissolution of partnership and dissolution of firm are different.
5. Realisation account is prepared at the time of dissolution of firm.
6. Realisation account is a nominal account.

## Difference between dissolution of partnership and dissolution of firm



## Difference between Revaluation account \& Realisation account

| Revaluation Account | Realisation Account |
| :---: | :---: |
| - Prepared at the time of admission, death and retirement of partner <br> - Prepared to show assets and liabilities at their revised values in order to assertain profit or loss <br> - Prepared many times during the life time of the firm. <br> - Shown only items having increase or decrease in values. <br> - No expenses are shown <br> - Firm will continues even after its preparation | - Prepared at the time of dissolution <br> - Prepared at the time of dissolution to assertain profit or loss on sale of asset and payment of liabilities. <br> - Prepared only once <br> - Assets and liabilities are shown at their book value <br> - Realisation expenses are shown <br> - Firm closes it's business after its preparation. |

$\mathrm{M}, \mathrm{N}, \mathrm{P}$ were partners sharing profit and losses in the ratio of 4:3:3. on Dec.31, 2010 their balance sheet was as follows:

| Liabilities | Amount | Assets | Amount |
| :--- | ---: | :--- | :---: |
| Sundry Creditors | 32000 | Cash at Bank | 41000 |
| General Reserve | 20000 | Debtors 39800 |  |
| N's brother's Loan | 16000 | Less provision 800 | 39000 |
| Capital |  | Stock | 24000 |
| M - 60000 | Furniture | 8000 |  |
| N - 48000 | Building | 88000 |  |
| P-24000 |  |  |  |
|  | 132000 |  | 200000 |
|  | 200000 |  |  |

The firm dissolved on that date and the assets were realized as:
Debtors: 37000, Stock 21000, Building 100000. The creditors were settled for Rs. 30000, M agreed to take over furniture at Rs. 8500 and N agreed to pay off his brother's loan. There was a liability of Rs. 8000 for damages which had to be paid. The expenses of dissolution amounted to Rs. 4000. Prepare realization A/c, Partner's CapitalA/c, Bank A/c.

## Points to remember while preparing realisation account:

1. The following items are debited in realization account
1) All assets except cash in hand, cash at bank and profit and loss account in the given balance sheet.
2) Liability paid off, liability takes over by the partner, realization expenses.
2. The following items are credited in realisation account.
1) All outside liability, provisions given in the balance sheet.
2) Assets realized
3) Assets taken over by partner.

## Note:

Cash in hand, cash at bank, Partner's capital account, partner's loan account, general reserve profit and loss (debit balance) should not be shown on realisation account.

## Points to remember while preparing capital account

1. Take realisation profit/loss to the capital account
2. General reserve/profit \& loss (dr) should be distributed among all the partners.
3. Don't write balance $c / d$ in the capital account

## Realization A/c

| To Debtors | 39800 | By Sundry Creditors | 32000 |
| :--- | ---: | :--- | ---: |
| To Stock | 24000 | By Provisions | 800 |
| To Furniture | 8000 | By N's brother's loan | 16000 |
| To Building | 88000 | By Bank (Assets **) | 158000 |
| To Bank (Creditor paid) | 30000 | By M's capital | 8500 |
| To N's capital | 16000 | By M's capital 1000 |  |
| To Bank (liability) | 8000 | By N's capital 750 |  |
| To Bank (Realisation exp.) | 4000 | By P's capital 750 | 2500 |
|  | 217800 |  | 217800 |

## Capital

Dr.
$\left.\begin{array}{|l|r|r|r|l|r|r|r|}\hline & \mathrm{M} & \mathrm{N} & \mathrm{P} & & \mathrm{M} & \mathrm{N} & \mathrm{P} \\ \hline \text { Realization } & 1000 & 750 & 750 & & \begin{array}{l}\text { By Balance b/d } \\ \text { By Realisation } \\ \text { Realization } \\ \text { (Furniture) }\end{array} & 8500 & \\ \text { A/c. N's brother's } \\ \text { laanA/c. }\end{array}\right)$

## Cash/BankA/c

Dr. Cr .

| To Balance b/d | 41000 | By Realization <br> (cr. paid) <br> To Realisation <br> By Realization (liability) <br> Realization <br> (Rel. exp) <br> By M's Capital | 30000 |
| :--- | :--- | :--- | :---: |
|  | 158000 | By N's Capital <br> By P's Capital | 5000 |

## Points to remember while preparing Cash/Bank Account

1. Write opening balance of cash on debit side of cash/bank a/c.
2. Debit cash account with the realized value of assets from realization account
3. Credit cash account with all payment of outside liabilities, realization expenses
4. If partner's loan is given in balance sheet, it should be credited in cash account.

## Some important Journal Entries

## 1. Unrecorded assets realized <br> Cash <br> $\qquad$ Dr.

To Realisation

## 2. Unrecorded liability paid off <br> Realisation <br> $\qquad$ Dr.

To cash
3. When partner takes over assets/liability

Partner's Capital $\qquad$ Dr.

To Realisation
(Assets taken over)
Realisation Dr.
To partners Capital
(Liability taken over)

## Chapter - 5

## ACCOUNTING FOR SHARE CAPITAL

## Meaning of Company:

Company is a group of persons who contribute money or money's worth to common stock and use it for a common purpose.

## Share Capital

Share capital is the capital of the company given by the share holders.
Share : It is the smallest unit in the share capital; Share is the share of the share capital.
Share holder: Persons taken the shares of the company

## Classification of share capital

1) Authorised Capital: Maximum amount of capital can be raised by the company through issue of shares.
2) Issued capital : That part of authorised capital issued by the company to the public for subscription.
3) Subscribed capital: That part of issued capital subscribed by the public.
4) Called up capital: That part of subscribed capital demanded by the company for payment.
5) Paid up capital: That part of called up capital actually paid by the share holders.

Reserve Capital :That part of un called capital which is to be called by the company only in the event of winding up.

Calls-in-arrears : That portion of called up capital not paid by the share holders with in time.

## Question No. 1

ABC Ltd. was formed with an authorised capital of Rs. 100000 divided in to 10000 shares of Rs. 10 each. It offered 9000 shares to the public for subscription. Out of which 8500 shares were subscribed for. The company called for an amount of Rs. 8/ share and received the entire amount except a call of Rs. $2 /$ share on 500 shares. Show the amounts of different types of share capital.

KINDS OF SHARES

| Preference Share | Equity Share |
| :--- | :--- |
| Preference share is the share with <br> preferencial rights. | Equity share is the share not a <br> preference share |
| 1. Preference to get divident | 1. No such preference |
| 2. Preference in repayment of capital | 2. No such preference |
| 3. Rate of dividend is fixed | 3. No fixed rate of divident |
| 4. Preference shares are in different types | 4. No such difference |
|  | 5. Real owners with voting rights. |

## Journal Entry for issue of Shares

i. On receipt of application money

Bank A/c. $\qquad$ Dr. [No.of application received $\times$ Application money per share] To share application a/c.
ii. To transfer application money to share capital

Share applicationA/c. $\qquad$ Dr.

To share capital
iii. When allotment money due

Share allotment A/c.
Dr [No.of share allotted $\times$ allotment money per share]
To share capital
iv. On receipt of allotment money

Bank A/c. $\qquad$ Dr. [No. of shares allotted $\times$ allotment money per share]
To share allotment
v. When call money is due

Share call A/c.....................Dr [No of share allotted $\times$ call money per share]
To share capital
vi. On receipt of call money

Bank A/c. $\qquad$ .Dr.

To share call $\mathrm{A} / \mathrm{c}$.

## Question No. 2

HCL Ltd issued a prospectus inviting application for 10000 equity shares of Rs. 10 each payable as follows

Rs. 2 on application; Rs. 4 on allotment; Rs. 2.50 on first call and Rs. 1.50 on second and final call.

The shares were fully subscribed and all amounts were received on due date.
Pass journal entries for issue of shares.

## Accounting Entries for calls - in arrears

Calls-in-arrears a/c. dr

To share allotment / call a/c

## Question No. 3

A company made second and final call of Rs. 2 per share on 10000 equity shares. Mrs Lalitha holding 500 shares failed to pay the call money on due date. Pass journal entries.

Calls in advance : When share holders paid entire amount on his shares before making the calls.

## Journal Entries

i On receipt of call money in advance
Bank A/c. $\qquad$ .Dr

To calls in advance. (Advance amount received)
Then call money is received
Bank A/c $\qquad$ Dr - actual amount received

Calls in advance $\mathrm{A} / \mathrm{c}$. $\qquad$ Dr - Advance received adjusted

To share call A/c.

Interest on calls in arrears : As per table A company can charge interest @ $5 \%$ per annum.
Journal Entry
(i) When interest is due

Share holders A/c............Dr
To interest on calls in arrears
(ii) For receipt of interest

Bank A/c. $\qquad$ Dr

To share holders $\mathrm{A} / \mathrm{c}$

## Interest on calls in advance :

Table a provides provision for giving interest @ $6 \%$ p. a for class in advance.
Journal Entries
(i) For interest on calls in advance due

Interest on calls in advance $\mathrm{A} / \mathrm{c}$ $\qquad$ Dr

To share holders $\mathrm{A} / \mathrm{c}$
(ii) For payment of interest

Share holders A/c. .Dr

To Bank

## Minimum Subscription

It is the minimum amount of capital required for a company for its incorporation.

## Under Subscription

When the number of shares applied for is less than the number of shares offered to the public for subscription. When there is under subscription the company can allot shares only if the minimum subscription is satisfied.

## Question No. 4

Galaxy Ltd issued 30000 equity shares of Rs.100/- each for public subscription payable Rs. 20/- an application, Rs.30/- on allotment and Rs.50/- on first and final call. The public subscribed only 20000 shares. Write journal entries in the book of the company assuming that all the amounts due were received in time.

## Over Subscription

Receiving more application than issued to public. Excess application money may be refunded to applicants or adjusted to allotment and calls.
Pro-rata allotment: When there is over subscription directors make a proportionate allotment of share to all the applicants. In this case all the applicants will get shares but less than they applied.

## Question No. 5

Sona Ltd issued 20000 shares of Rs.10/- each payable as to Rs. 3 on application; Rs.4/- on allotment and Rs. $3 /-$ on first and final call. Applications were received for 35000 shares. The directors of the company decided to allot shares as follows.
i) To the applicants of 5000 shares - Nil
ii) To the applicants of 10000 shares - Full
iii) To the applicants of 20000 shares - 10000 shares

The amount due on allotment and calls were duly received except first call money as 400 shares. Pass journal entries in the book of the company.

## Issue at par, premium and discount

Issued at par: Issued at face value. eg. a share of Rs. 100 issued at Rs. 100

## Issued at Premium

Issued at a price higher than face value. It is a capital gain and therefore it is credited to securities premium $\mathrm{a} / \mathrm{c}$. and shown on the liabilities of the balance sheet (under reserve and surplus)

It cannot be used for payment of dividend

## Realization of securities premium

- Issue ofbonus shares
- Paying premium of shares and debentures
- To write off preliminary expense
- To write off discount an issue of shares and debentures.


## Journal Entry

1. If premium amount is collected with application
i) Bank A/c $\qquad$ .Dr (application money + premium)

To share applicationA/c
ii) Share application $\mathrm{A} / \mathrm{c}$. $\qquad$ Dr (application money + premium)

To share capital (application money only)
To securities premium (premiumamount only)
2. If premium amount is collected along with allotment money
i) Share allotment $A / c$. $\qquad$ Dr
To share capital To Securities premium
ii) Bank $\mathrm{A} / \mathrm{c}$ $\qquad$ Dr

To share allotment $\mathrm{A} / \mathrm{c}$
(allotment + premium)
(allotment money only)
(premium amount collected)
(Allotment money + premium)
(Allotment money + premium)

## Question No. 6

Poornima Ltd issued 20000 equity share of Rs.10/- each at a premium of Rs. 2 per share payable Rs. 2 on application Rs. 5 on allotment including premium and Rs. 5 on first and final call. All the shares were duly subscribed and allotted. Pass journal entries for the above.
Hint: Allotment due - Rs. 3 (Allotment) + Rs. 2 (premium) for 20000 shares

## Issued at a discount

Issue of shares less than the face value. It is a capital loss and debited in a separate account known as discount on issue of shares $\mathrm{a} / \mathrm{c}$ and shown on the asset side of the Balance Sheet under miscellaneous Expenditure.

## Conditions for issue at a discount

- Resolution passed by the company general meeting
- Sanctioned by company law board
- Maximum discount rate is $10 \%$
- One year must be completed by the company
- Shares must belong to a class already issued.


## Journal Entry: (Adjusted with allotment)

Share allotment A/c $\qquad$ Dr

Discount on issue of shares $\mathrm{A} / \mathrm{c}$.....Dr
To share capital

## Example for issue at a discount

A company issued 1000 shares of Rs. 100 at a discount of $10 \%$ (Here Rs.10/- 100x10/100) is treated as a discount). The application money is Rs. 20 and allotment money Rs. 30 and balance in 2 equal instalment and discount is adjusted with allotment money. Journal entry for adjustment of discount will be

| Share allotment A/c .............Dr <br> $(100 \times 30)$ | 30000 |
| :---: | ---: |
| Discount on issue A/c............Dr |  |
| $(100 \times 10)$ | 10000 |
| To share capital | 40000 |

## Forfeiture of shares

Cancellation of shares due to non payment of allotment or call money.
Amount already paid by the share holders belong to company.

## Journal entries

1. Forfeiture of shares issued at par

Share capitalA/c. $\qquad$ Dr (called up)

To share forfeited $\mathrm{A} / \mathrm{c}$ (paid) To share allotment/call (unpaid amount)

## 2. Forfeiture of shares issued at premium

(i) If premium is collected
"same entry in the case of par"
(ii) If premium is due but not received

Share capital A/c $\qquad$ Dr (called up)

Securities premium A/c......Dr (Amount of premium)
To share forfeited $\mathrm{A} / \mathrm{c}$ (paid)
To Allotment / call A/c (unpaid)

## 3. Forfeiture of shares issued at discount

| Share capitalA/c................ Dr | (called up) |
| :---: | :--- |
| To share forfeited $\mathrm{A} / \mathrm{c}$ | (amount paid) |
| To discount on issue of shares | (discount) |
| To allotment/callA/c | (unpaid) |

## Question No. 7

X Ltd forfeited 1000 equity share of Rs. 100 each for non payment of 1st and final call of Rs. 30 per share. Give journal entries for forfeiture.

## Question No. 8

XLtd forfeited 1000 equity share of Rs. 100 each issued at a premium of Rs. 20 per share
Application money Rs. 30 /share
Allotment money Rs. 60/share (including premium)
1st and Final call Rs.30/share
Give journal entries for forfeiture
(i) Premium is collected
(ii) Premium is not collected

Hint: In the first case application money and allotment money is collected and in the second case only application money is collected.

## Question No. 9

X Ltd forfeited 500 shares of Rs. 10 each issued at a discount of Rs. 10 for non payment of 1st call Rs. 2 per share and final call Rs. 3 per share. Show journal entries for forfeiture.

## Re-issue of forfeited shares

Forfeited shares can be re issued either at par or at a premium or at a discount

- If issued at a discount the discount on re-issue shall not exceed the amount actually paid an such shares by the original share holders.
- Balance on share forfeited $\mathrm{a} / \mathrm{c}$ after re-issue transferred to capital reserve $\mathrm{a} / \mathrm{c}$.


## Question No. 10

Gloria Ltd forfeited 500 shares of Rs. 10 each for non payment of final call Rs. 3 per share. These shares were re-issued for Rs. 8 per share. Give journal entries.

Hint: Here capital reserve Rs. 2500

## Question No. 11

Golden Ltd invited application for 40000 shares of Rs.10each at a discount of $10 \%$ payable as follows.

On application Rs.2/- on allotment Rs.3/- first call Rs.2/- and final call Rs.2/-. All the shares were applied for and allotted. All the money were received except the final call on 500 shares which were forfeited and subsequently re-issued at Rs. 7/share.

Give journal entries for the above.
Hint: Only journal entry for re-issue.
Amount of capital reserve is Rs.2500/-

## Issue of shares other than cash

Issue of shares against purchase of asset
Asset A/c. .Dr.

To vendors a/c

Vendors A/c. .Dr

To share capital
Calculation of number of shares issued against purchase consideration

$$
=\frac{\text { Purchase price of asset }}{\text { Issue price per share }}
$$

## Issue of shares to promoters

Journal entry: Goodwill A/c............... Dr.
To share capital

## Question No. 12

Anu Ltd was registered with a share capital of Rs. 200000 in shares of Rs. 10 each. The company purchased machinery from machine tools for 50000 payable in fully paid up shares and directors decide to allot 2000 shares to promoters for their services. Give journal entries for the above.

## Right issue

When a company makes additional issue, the existing share holders have a right to get these shares.

## Bonus shares :

Shares issued to existing share holders free of cost out of 'accumulated profit and Reserve'.

## Sweat Equity

- Issue of shares to employees or directors
- Normally issued at a discount or for consideration other than cash
- Special resolution is required.


## Employees stock option plan (ESOP)

Right of full time directors, officers, employees to subscribe shares at a predetermined price.

## Accounting for Debentures

Debenture : It is the creditorship securities issued by the company .
Difference between shares and debentures

| Share | Debenture |
| :--- | :--- |
| 1. It is owners capacity | 1. It is creditors equity |
| 2. Gets dividend | 2. Gets interest at a fixed rate |
| 3. Gets right to vote | 3. No right to vote |
| 4. Always unsecured | 4. Always secured |
| 5. Cannot converted into debentures | 5. Can be converted into shares. |

## Issue and redemption of debentures

Debentures are issued and redeemed under the following conditions.

1. Debenture issued at par Rs.10/- and redeemable at par Rs.10/-
i) At the time of issue

Bank A/c.......................Dr 10
To debenture A/c 10
ii) At the time of redumption

Debenture A/c................Dr 10
To Bank 10
2. Debenture issued at a premium (Rs.10+2) and redeemable at par
i) At the time of issue

Bank A/c.....................Dr 12
To Debenture A/c 10
To Securities premium 2
ii) At the time of redemption

Debenture A/c. $\qquad$ Dr 10

To Bank 10

## 3. Debentures issued at a discount (10-2) and redeemable at par (Rs.10/-)

i) At the time of issue
Bank A/c.................. Dr 8

Discount on issue of -
debenture $\mathrm{A} / \mathrm{c}$...........Dr 2
To Debenture 10
ii) At the time of redumption

Debenture $\mathrm{A} / \mathrm{c}$..................Dr 10
Premium on redemptionA/c....... Dr 2
To Bank A/c 12

## Question No. 1

Ltd issued the following debentures

1. $10 \%$ Debentures of Rs. 100000 issued as par and redeemable at par
2. $10 \%$ Debentures of Rs. 100000 issued at a discount of $10 \%$. but redeemable at par.
3. $10 \%$ Debentures of Rs. 100000 issued at premium of $10 \%$ but redeemable at par.
4. $10 \%$ Debentures of Rs. 100000 issued at par but redeemable at a premium of $10 \%$
5. $10 \%$ Debentures of Rs. 100000 issued at a discount of $10 \%$ but redeemable at a $10 \%$ premium- Give journal entries.

## Debentures as collateral security

Additional securities given by the company in the form of debentures for obtaining loans from financial institutions.

## Accounting treatment

1st method - No journal entry is passed in the book of the company (Here debenture issued is shown as a note under the specific loan)

Balance Sheet

| Liability | Amount | Asset | Amount |
| :---: | ---: | ---: | ---: |
| Bank Loan <br> (Debentures issued as <br> collateral security) | xxx |  |  |

IInd method - If the company decide to show the debentures issued as collateral security separately, the debentures are shown on the liability side and debenture suspense $\mathrm{a} / \mathrm{c}$ is shown on the asset side of the balance sheet.

Balance Sheet

| Liability | Amount | Asset | Amount |
| :--- | ---: | :--- | :---: |
| Bank loan | xxx | Debenture suspense |  |
| \% Debentures | xxx | $\mathrm{A} / \mathrm{c}$ | xxx |
|  |  |  |  |

Issue of debentures for consideration other than cash
Journal entry : (i) on purchase of asset
Asset A/c..................Dr
To vendors a/c
(ii) On issue of debentures

Vendors A/c.............Dr
To Debentures A/c

## Methods of Redemption of Debentures

1. Lumpsum payment method
2. Draw of Lots or annual instalment method
3. By purchasing own debentures from the open market

## Shares of Redemption of Debentures

1. Redemption out of profits
2. Redemption out of capital
3. Redemption out of provisions/sinking fund method.

## Interest and Ex Interest quotations

When the purchase price of the debentures includes the interest for expired period (that is interest accrued as them) the quotation is cum-interest. When the purchase price of the debentures does not include the interest for the expired period the quotation is said to be Ex-interest.

## Chapter - 6

## ANALYSIS OF FINANCIALSTATEMENT

## Meaning of Financial Statement

The term financial statement refers to the two statements, which are usually prepared by a business concern at the end of the accounting year. They are;

1) The Profit \& Loss A/c (or) Income Statement, and
2) The Balance Sheet (or) Position Statement.

## Meaning of Analysis of Financial Statement (or) Financial Analysis

Financial analysis is the process of identifying the strength and weaknesses of the company with the help of $\mathrm{P} \& \mathrm{~L} \mathrm{~A} / \mathrm{c}$ and Balance sheet. The main objects of analysis of financial statements are;

1) To determine the progress of the concern
2) To measure the operational efficiency of the concern
3) To judge the financial position of the concern etc.

## Tools or Methods of Financial Analysis

The important tools or methods of financial analysis are;

1) Comparative statements
2) Common size statements
3) Trend Analysis
4) Ratio Analysis
5) Fund flow statement and
6) Cash flow statement.

## Types of financial Analysis

## 1) Horizontal Analysis

Under horizontal analysis, financial statement for a number of years are analysed. It is also known as 'Dynamic Analysis'.
2) Vertical Analysis

Under vertical analysis, financial statements of just one accounting year are analysed.
It is also known as 'Static Analysis'.

## 3) External Analysis

It is the analysis done by external parties (i.e, outsiders to the business)

## 4) Internal Analysis

It is the analysis done by internal parties. Internal Analysis is more detailed than external analysis.

## Limitations of financial statements

1. Financial statements are only interim reports.
2. Financial statements are historical in nature.
3. It ignores price level changes.
4. It does not consider non-monetary factors such as efficiency of mgt, credit worthiness etc.

## Comparative Statements

Comparative Statements are the scientific systematic and proper arrangement of financial statements to make a comparative study regarding profitability, efficiency and financial position of an enterprise.

Comparative statement may be of:
i) Comparative income statement and
ii) Comparative Balance Sheet

- Prepare a comparative income statement

| Items | 2009 | 2010 |
| :--- | ---: | ---: |
| Net sales | 1570000 | 1800000 |
| Cost of Goods sold | 900000 | 1000000 |
| Operating expenses: |  |  |
| General \&Administrative expense | 140000 | 144000 |
| Selling expense | 160000 | 180000 |
| Non-operating expenses: |  |  |
| $\quad$ Interest paid | 50000 | 60000 |
| $\quad$ Income tax | 140000 | 160000 |

Solution :
Comparative Income Statement

| Particulars | 2009 <br> Amount | 2010 <br> Amount <br> (decrease | Absolute <br> Increase <br> (decrease) | *Percentage <br> Increase |
| :---: | ---: | ---: | ---: | ---: |
| Net Sales | 1570000 | 1800000 | 230000 | 14.65 |
| Less : Cost of Goods sold | 900000 | 1000000 | 100000 | 11.11 |
| Gross profit <br> Less : Operating expenses : <br> General and Admn. <br> expenses <br> Selling Expenses <br> Operating profit | 670000 | 800000 | 130000 | 19.40 |
| Less : Interest paid | 140000 | 140000 | 180000 | 20000 |

* Percentage increase/decrease $=\frac{\text { Amt. of increase/decrease }}{\text { Base ware amount }} \times 100$

Form of Company Balance Sheet

| Liabilities | Amount | Assets | Amount |
| :---: | :---: | :---: | :---: |
| (1) Share Capital |  | (1) Fixed Assets |  |
| Authorised Capital |  | Goodwill | xxx |
| .............. shares |  | Patent \& trade mark | xxx |
| of Rs. .... each | xxx | Live stock (ヵm¢ృ円๐¢) | xxx |
| Issued subscribed, |  | Land | xxx |
| called up \& paid up |  | Buildings | xxx |
| capital |  | Lease holds | xxx |
| ..... shares of Rs. ..... each | xxx | Plant \& Machinery | xxx |
|  |  | Furnitures \& Fittings | X xx |
|  |  | Vehicles etc. | xxx |
| (2) Reserves \& Surplus <br>  |  | (2) Investments <br>  |  |
| Capital Reserves | xxx | Investments in shares, |  |
| Security premium | xxx | debentures, Govt. |  |
| Other Reserves | $x \mathrm{xx}$ | securities etc. | xxx |
| P \& LA/c (eољ๐) | $x \mathrm{xx}$ |  |  |
| Sinking Fund | xxx |  |  |
| (3) Secured Loans |  | (3) Current Assets, |  |
|  |  | Loans \& Advances |  |
| Debentures | xxx | (a) Current Assets |  |
| Loans \& advances |  | Interest accrued | xxx |
| from banks \& |  | Stores \& spare parts | x xx |
| other institutions | xxx | Loose tools | x xx |
| (4) Unsecured Loans |  | stock-in-trade | x xx |
|  |  | work-in-progress | x xx |
| Fixed deposit | xxx | Sundry debtors | x xx |
| Loans \& advances | x x $x$ | Cash in hand | x xx |
| from subsidiaries |  | Bank balance | x xx |
| (5) Current Liabilities |  | (b) Loans \& Advances |  |
| \& Provisions |  |  |  |
| (a) Current Liabilities |  | Bills Receivable | x xx |
| Bills payable | xxx | prepaid expense | x xx |
| Sundry creditors | x x $x$ | (4) Miscellaneous |  |
| Income received |  | Expenditure |  |
| in advance | $x \mathrm{xx}$ | Preliminary expenses | xxx |
| $\mathrm{O} / \mathrm{s}$ expenses | xxx |  |  |
| Unclaimed dividents etc. | xxx | Expense/Commission/ |  |
| (b) Provision <br> Provision for taxation | xxx | Brokerage on issue of shares or debantures |  |
| proposed dividend | x x $x$ | Discount on issue of shares <br> (5) Profit and Loss A/c. | x $\times$ x |
|  | x x $x$ |  | xxx |

## (1) Proforma of Comparative Income Statement

| Particulars | Base year (previous) Amount | Current year <br> Amount | Absolute increase (decrease) | Percentage increase (decrease) |
| :---: | :---: | :---: | :---: | :---: |
| Sales | xxx | xxx |  |  |
| Less : Sales Returns | xxx | $x \mathrm{xx}$ |  |  |
| Net Sales | xxx | xxx |  |  |
| Less : Cost of Goods sold | $x \mathrm{xx}$ | xxx |  |  |
| Gross profit | xxx | $x \times x$ |  |  |
| Less : Operating expenses | $x \mathrm{xx}$ | $x \mathrm{xx}$ |  |  |
| Operating profit | x $x$ x | x $x$ x |  |  |
| Less : Non-operating expenses | $x \mathrm{xx}$ | $x \mathrm{xx}$ |  |  |
|  | $x \times x$ | x $x$ x |  |  |
| Add: Non-operating incomes | $x \times x$ | $x \times x$ |  |  |
| Net profit beofre tax | x $x$ x | $x \times x$ |  |  |
| Less : Income tax | $x \times x$ | $x \times x$ |  |  |
| Net profit after tax | x $x$ x | x xx |  |  |

(2) Prepare a Comparative Balance sheet from the following Balance Sheets of X Ltd. as on 31st March 2010 and 2011.

## Balance Sheet as on 31st March

| Liabilities | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | Assets | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Share Capital | 800000 | 1000000 | Plant \& Machinery | 600000 | 540000 |
| Reserves \& Surplus | 300000 | 400000 | Furniture \& fixtures | 40000 | 60000 |
| Debentures | 200000 | 300000 | Debtors \& Stock | 700000 | 100000 |
| Bills Payable | 60000 | 40000 | Bills receivable | 100000 | 200000 |
| Sundry creditors | 240000 | 360000 | Cash \& Bank | 160000 | 300000 |
|  | $\mathbf{1 6 0 0 0 0 0}$ | $\mathbf{2 1 0 0 0 0 0}$ |  | $\mathbf{1 6 0 0 0 0 0}$ | $\mathbf{2 1 0 0 0 0 0}$ |

## Comparative Balance Sheet

| Particulars | 2010 <br> Amount | 2011 <br> Amount | Amount <br> Increase <br> (decrease | Percentage <br> Increase <br> (decrease) |
| :--- | ---: | ---: | ---: | ---: |
| Sources of Funds | 800000 | 1000000 | 200000 | 25 |
| Share capital | 300000 | 400000 | 100000 | 33.33 |
| Reserves \& Surplus | 200000 | 300000 | 100000 | 50 |
| Debentures | 240000 | 360000 | 120000 | 50 |
| Sundry creditors | 60000 | 40000 | $(20000)$ | $(33.33)$ |
| Bills payable |  |  | $\mathbf{5 0 0 0 0 0}$ | $\mathbf{3 1 . 2 5}$ |
| Total of Capital \& Liabilities | $\mathbf{1 6 0 0 0 0 0}$ | $\mathbf{2 1 0 0 0 0 0}$ |  |  |
| Application of funds |  |  |  |  |
| Fixed Assets : | 600000 | 540000 | $(60000)$ | $(10)$ |
| Plant and Machinery | 40000 | 60000 | 20000 | 50 |
| Furniture \& Fixtures |  |  |  |  |
| Current Assets : | 160000 | 300000 | 140000 | 87.50 |
| Cash and Bank | 100000 | 200000 | 100000 | 100 |
| Bills Receivable | 700000 | 1000000 | 300000 | 42.88 |
| Debtors and Stock | $\mathbf{1 6 0 0 0 0 0}$ | $\mathbf{2 1 0 0 0 0 0}$ | $\mathbf{5 0 0 0 0 0}$ | $\mathbf{3 1 . 2 5}$ |
| Total Assets |  |  |  |  |

## Common Size Statement

Common Size statements are those statements in which items are converted into percentages taking a common base. These statements are also known as $100 \%$ statement.

Common size statement may be of:
a) Common size income statement, and
b) Common size Balance sheet
a) Common size income statement

It is a statement in which each item is shown as a percentage of net sales.
b) Common size balance sheet :

It is a statement in which each asset is shown as a percentage of total asset and each liability and capital is shown as a percentage of total liability and capital
3) Prepare a common size income statement
sales

- 500
selling expenses
- 30
cost of sales - 325 Interest 25
office expenses - 20


## Solution

## Common size income statement

| Particulars | Amount | \% on sales |
| :--- | :---: | :---: |
| Sales | 500 | 100 |
| less: cost of sales | 325 | $65 \quad\left(\frac{325}{500} \times 100\right)$ |
| Gross profit | 175 | 35 |
| less: Operating expenses |  |  |
| office expenses | 20 | 4 |
| Selling expenses | 30 | 6 |
| Operating profit | 125 | 25 |
| less: Non-operating expenses | 25 | 5 |
| Interest | $\mathbf{1 0 0}$ | $\mathbf{2 0}$ |
| Net profit |  |  |

4) From the following Balance sheet, prepare a common size balance sheet.

Balance sheet as on 31-03-2011

| Liabilities | Amount | Assets | Amount |
| :--- | ---: | :--- | ---: |
| Equity share capital | 400000 | Plant \& Machinery | 400000 |
| Reserves \& Surpue | 120000 | Furniture \& Fixtures | 40000 |
| $12 \%$ Debentures | 80,000 | Stock \& Debtore | $2,00,000$ |
| Creditors | $2,00,000$ | Cash \& bank | $1,60,000$ |
| Total | $\mathbf{8 , 0 0 , 0 0 0}$ |  | $\mathbf{8 , 0 0 , 0 0 0}$ |

## Common size Balance Sheet

| Particulars | Amount | \% of sales |
| :--- | ---: | :---: |
| Source of funds |  |  |
| Equity share capital | $4,00,000$ | 50 |
| Reserves \& Surplue | $1,20,000$ | 15 |
| 12\% Debentures | 80,000 | 10 |
| Creditors | $2,00,000$ | 25 |
| Total of capital \& Liabilities | $8,00,000$ | 100 |
| Applicaton of funds |  |  |
| plant \& Machinery | $4,00,000$ | 50 |
| Furniture \& Fixtures | 40,000 | 5 |
| Stock \& Debtore | $2,00,000$ | 25 |
| cash \& bank | $1,60,000$ | 20 |
| Total Assets | $\mathbf{8 , 0 0 , 0 0 0}$ | $\mathbf{1 0 0}$ |

## Trend Analysis (trend precentages):

It is an important tool of horizontal finance analysis. Comparing the past data over a period of time with a base year is called Trend Analysis.

Trend percentage $=\frac{\text { Current year Amt }}{\text { Base year Amt }} \times 100$
5) Calcualte the trend percentage from the following figures.

| Particulars | 2001 | 2002 | 2003 |
| :--- | ---: | ---: | ---: |
| Sales | 1881 | 2340 | 2655 |
| Stock | 709 | 781 | 816 |
| Gross profit | 321 | 435 | 458 |

## Calculation of trend percantages

| Particuars | Absolute Figure |  |  | Percentage |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 |
| Sales | 1881 | 2340 | 2655 | 100 | 124 | 141 |
| Stock | 709 | 781 | 816 | 100 | 110 | 115 |
| Gross profit | 321 | 435 | 458 | 100 | 136 | 143 |

## Ratio Analysis

Ratio analysis is one of the techniques of analysis of financial statements.
It refers to the process of determining and presenting the relationship of various items in the financial statements.

## Types of Ratios

Ratios can be broadly classified as;

1) Liquidity Ratios
2) Solvency Ratios
3) Activity Ratios, and
4) Profitability Ratios

Liquidity Ratios: Liquidity ratios are those ratios which are used to measure the liquidity positions or short tern financial position of the business

Liquidity Ratios are also known as 'Balance sheet Ratios’ Important liquidity ratios are;
(a) Current Ratios and
(b) Quick Ratio
(a) Current Ratio: It shows the relationship between CA and CL. An ideal CR is 2:1. A high CR means high liquidity and a CR ratio means low liquidity.

$$
\begin{gathered}
\text { Current Ratio }=\frac{\text { Current Assets }}{\text { Current Liabilities }} \\
\text { or (working capital Ratio) }
\end{gathered}
$$


(i) Cash in hand
(ii) Cash at bank
(iii) Bills Receivable
(iv) Sundry Debtors/trade Debtors
(v) Stock / Inventory
(vi) Accrued income (கารูวกృช8 வ๐ృロ๐m๐)

(viii) Short term investment / Marketable securities/ temporary investments/ trade investments.






(iv) Short term loans
(v) Outstanding Expenses / Expenses payable.



b) Quick Rato (or) Liquid Ratio (or) Acid- test Ratio

It is the ratio which shows the relationship between Quick Assets and current Liabilities. It is the most precise measure of liquidity. Ideal Quick Ratio is 1:1

$$
\text { Quick Ratio }=\frac{\text { Quick Assets }}{C L}
$$

Quick Assets $=$ C A $-($ Stock + prepaid Expenses $)$
Stock $=$ C A - Q.A.

1) Calculate (a) current Ratio and (b) Liquid Ratio from the following.

| Cash at bank | $-15,000$ | Stock | $-14,000$ |
| :--- | :--- | :--- | ---: |
| Dabtore | $-20,000$ | Prepaid expenice | $-r$ |
| Creditore | $-20,000$ | outstanding expenses | -2000 |

(a) Current Ratio $=\frac{\text { Current Assets }}{\text { Current Labilities }}$
(b) Current Assets $=$ Cash at bank + Debtors + Stock + Prepaid Expenses

$$
=15,000+20,000+14,000+3000=52,000
$$

Current Liabilities $=$ creditore + outstanding Expenses

$$
=20,000+2000=22,000
$$

Current Ratio $=\frac{52000}{22000}=2.36: 1($ or $) 2.36$

Liquid Ratio $=\frac{\text { Quick Assets }}{\text { CL }}$

Quick Assets $=$ cash at bank + Debtors

$$
=15,000+20,000=35,000
$$

(or) Q.A $=$ C.A- (stock + prepaid Expenses)

$$
=52,000-(14,000+3000)=35,000
$$

C. $\mathrm{L}=22,000$

Liquid Ratio $=\frac{35,000}{22,000}=1.59:($ or $) 1.59$
From the following calculate
a) Current Assets b) Liquid Assets c) Inventory

Current ratio 2.5:1 Quick ratio 1.5:1 Current Liability (CL) $=60,000$
Given $\quad \mathrm{C} R=2.5$

$$
\mathrm{Q} \mathrm{R}=1.5
$$

$$
\mathrm{C} L=60,000
$$

$$
\mathrm{C} \mathrm{R}=\frac{C A}{C L}
$$

$$
\frac{X}{60,000}=2.5
$$

$$
X=60,000 \times 2.5=1,50,000
$$

Current Assets $=1,50,000$
Quick Ratio $=\frac{\text { Quick Assets }}{C L}$

$$
\begin{aligned}
& \quad \frac{X}{60,000}=1.5 \\
& \mathrm{X}=60,000 \times 1.5=90,000 \\
& \text { Quick Assets }=90,000 \\
& \text { investory }(\text { Stock })=\text { C A - Q A } \\
& \qquad=1,50,000-90,000=\text { Rs. } 60,000
\end{aligned}
$$

3) From the following calculate
(a) current Assets (b) current Liabilities and (c) Stock
current Ratio - 2.5
Quick Ratio-1.5
Working capital $=1,20,000$
Working capital $=\mathrm{CA}-\mathrm{CL}$
CL be $x$
$\mathrm{CA}=2.5 x$
$2.5 x-x=1,20,000$

$$
1.5 x=1,20,000
$$

$x=\frac{1,20,000}{1.5}=80,000$
C. $L=80,000$
$\mathrm{CA}=2.5 x$

$$
=2.5 \times 80,000=20,000
$$

Stock $=$ CA - QA
$Q . R=\frac{\mathrm{Q} . \mathrm{A}}{C L}$
$\frac{\text { Q.A }}{80,000}=1.5$
Q.A - $80,000 \times 1.5=1,20,000$

Stock $=2,00,000-1,20,000=80,000$
(a) Current Assets $=$ Rs. 2,00,000
(b) Current Liabilities $=$ Rs. 80,000
(c) Stock $=$ Rs. 80,000
ii) Solvency Ratios are those ratios which are used to measure the solvency position i.e long term financial position Solvency Ratios are also known as leverage Ratios.

Important solvency Ratios are
(i) Interest coverage Ratio
(ii) Debt-Equity Ratio
(iii) Proprietory Ratio etc.
(a) Interest coverage Ratio.

It is the ratio which shown the relationship between profit before interest \& tax and interest. It shows the number of times profit cover the interest.

Interest coverage Ratio $=$ profit before interest \& tax Interest.

## (b) Debt - Equity Ratio.

It is the ratio which shows the relationship between Debt \& Equity. (i.e Borrowed fund and owned fund. It shows the proportion of owners fund and borrowed fund invested in the business. A high debt equity ratio indicates low protection to lenders and a low ratio indicates higher protection to lenders.

Debt - Equity Ratio $=\frac{\text { Debt }}{\text { Equity }}$

Debt includes-
i) Debentures
ii) L.T Loans (TermLoan, Mortigage etc)
iii) Public deposits

Equity / share holders fund / owners fund includes
i) Equity share capital
ii) Preference share capital
iii) General Reserves
iv) Other reserves and
v) $\quad \mathrm{P} \& L(\mathrm{Cr})$ balance

Equity = Share capital + Reserves \& Surplus - Fictitious Assets \& Losses.
c. Proprietory Ratio

It is the ratio which shows the relationship between proprietors funds and total assets.
It reflects the general financial strength of the concern. A high ratio means favourable position to creditors.

| Proprietory Ratio $=\frac{\text { Proprietory fund (equity) }}{\text { Total Assets }}$ |
| :---: |

4. From the following balance sheet, find
a) Debt-Equity ratio
b) Proprietory ratio

Balance sheet as on 31st dec. 2010

| Liabilities | Amount | Assets | Amount |
| :--- | ---: | :--- | ---: |
| Equity share capital | 200000 | Land \& Building | 150000 |
| Preference share capital | 20000 |  | Plant \& Machinary |

Debt Equity Ratio = $\underline{\text { Debt }}$

> Equity

Debt $=12 \%$ debentures $=220000$

Equity $=$ Equity share capital + preference share capital
General reserve + Profit \& Loss A/c.
$=200000+200000+80000+40000$
$=520000$
Debt - Equity Ratio $==\frac{220000}{520000}=0.42: 1$
b. Proprietory Ratio $=$ Shareholders fund (equity)

Total assets

Shareholders fund (or) equity $=520000$
Total Assets $=890000$
Proprietary Ratio $=\frac{520000}{890000}=0.58: 1$

## iii. Activity Ratios (or) Performance Ratios

Activity Ratios are those ratios which are used to measure the performance or the efficiency of an enterprise. These ratios are usually calculated on the basis of sales.

Important activity ratios are;
a) Inventory turnover ratio/Stock turnover ratio
b) Debtors Turnover ratio/Receivables Turnover Ratio
c) Creditors Turnover Ratio/Payable turnover ratio
d) Working capital turnover ratio
e) Fixed Assets Turnover Ratio etc.
a) Inventory Turnover Ratio/Stock Turnover Ratio (or) Stock Velocity

It is the ratio which shows the relationship between cost of goods sold and average stock.

$$
\text { Inventory T/o Ratio }=\frac{\text { Cost of goods sold }}{\text { Average stock }}
$$

Where COGS $=$ Opening stock + Net purchases + direct expenses - closing stock.
OR
COGS $=$ Net sales - Gross profit
Average stock = Opening Stock + closing stock
Inventory turnover ratio indicates the speed ofsales. Ahigh ratio indicates better performance.
5. From the following trading account, calculate inventory turnover ratio.

## Trading account

Dr. Cr.

| Particulars | Amount | Particulars | Amount |
| :--- | ---: | :--- | ---: |
| Op.stock | 80000 | Sales | 330000 |
| Purchases | 200000 | Closing stock | 70000 |
| Wages | 20000 |  |  |
| Carriage | 10000 |  |  |
| Gross profit c/d | 90000 |  | 400000 |
|  | 400000 |  |  |

Inventory turnover ratio $=\frac{\text { Cost of goods sold }}{\text { Average stock }}$
COGS $=$ Sales - G/P $=330000-90000=240000$
or [COGS $=$ Op. stock + purchases + wages + carriage - closing stock]
$=80000+200000+20000+10000-70000=240000$
Avg stock $=\frac{\text { Opening stock }+ \text { closing stock }}{2}=\frac{80000+70000}{2}=75000$
Inventory turnover ratio $=\frac{240000}{75000}=3.2 \mathrm{times}$
b. Debtors turnover ratio/debtors velocity/Receivable turnover ratio

It is the ratio which shows the relationship between credit sales and average accounts receivable.
Debtors Turnover Ratio $\quad=\frac{\text { Credit sales }}{\text { Avg accounts receivable }}$
i.e., Credit Sales

$$
\text { Average of debtors \& } \mathrm{B} / \mathrm{R}
$$

It measures the efficiency of debt collection. Ahigh ratio means prompt repayment of debtors.
Average collection period (or) Debt collection period.
It gives the collection period
Debt collection period $=\quad \frac{\text { Days } / \text { Months in a year }}{\text { Debtors T/o Ratio }}$

$$
\text { (or) } \frac{\text { Days / months in a year }}{\text { credit sales }} \times \text { Avg.accounts receivable }
$$

6. Calculate debtors turnover ratio and debt collection period

Total sales for the year 2010 - 100000
Cash sales for the year 2010 - 20000
Debtors as on 1.1.2010 - 10000
Debtors as on 31.12.2010 - 15000
Bills receivable as on 1.1.2010 - 7500
Bills receivable as on 31.12.2010 - 12500
a) Debtors Turnover Ratio $=\frac{\text { Credit Sales }}{\text { Average accounts receivable }}$

Credit Sales $=$ Total sales - Cash sales
$=100000-20000=80000$
Average accounts receivable $=\underline{\text { Op. bal. of debtors } \& B / R \text { and } C l . \text { bal. of debtors } \& B / R}$ 2

$$
=\frac{17500+27500}{2}=22500
$$

Debtors turnover ratio $==\frac{80000}{22500}=3.56 \mathrm{times}$
b. Debt collection period $=\frac{\text { Dayis in a year }}{\text { Debtors T/o Ratio }}$

$$
=\frac{365}{3.56}=103 \mathrm{days}
$$

## Creditors Turnover Ratio / Payable Turnover Ratio/Creditors velocity

It is the ratio which shows the relationship between credit purchases and average accounts payable.

Creditors T/o Ratio $=\frac{\text { Credit Purchases }}{\text { Average accounts payable }}$
i.e. Credit Purchases

Average of creditors \& Bills payable

It measures the promptness in making payment on credit purchases.

Average debt payment period / Debt payment period
Debt payment period $=\frac{\text { Days/Month in a year }}{\text { Creditors Turnover Ratio }}$
7. Calculate the creditors turnover ratio and average debt payment period

Rs.
Credit purchases during $2010-1,05,000$
Purchase returns - 5,000
Creditors on 01-01-2010 - 20,000
Creditors on 31-12-2010 - 10,000
Bills payable on 1-1-2010 - 4,000
Bills payable on 31-12-2010 - 6,000
a) Creditors turnover ratio $=\frac{\text { Net credit purchase }}{\text { Average accounts payable }}$

Net credit purchase $=1,05,000-5,000=100000$

Average accounts payable $=$
Op.Balance of creditors \& Bills payable and closing balance of creditors \& B/p
2

$$
=\frac{24000+16000}{2}=20000
$$

Creditors T/o Ratio $=\frac{100000}{20000}=5$ times
b. Average debt payment period $=\frac{\text { Days in a year }}{\text { Creditors T/o Ratio }}$

$$
=\frac{365}{5}=73 \text { days }
$$

c. Working capital turnover ratio

It is the ratio which shows the relationship between sales and working capital

$$
\text { Working capital T/o Ratio }=\frac{\text { Net Sales }}{\text { Working capital }}
$$

working capital = current assets - current liabilities
Working capital T/o Ratio measures the efficieny in the utilisation of working capital

## iv. Profitability Ratios

Profitability Ratios are those ratios which are used to measure the profit earning capacity of an enterprise. Important profitability ratios are;
a. Gross profit ratio
b. Net profit ratio
c. Operating ratio
d. Operating profit ratio
a) Gross profit ratio

It is the ratio which shows the relationship between gross profit and net sales.
It is also known as gross margin.

$$
\text { G/P Ratio }=\frac{G / P}{\text { NetSales }} \times 100
$$

$\mathrm{G} / \mathrm{P}=$ Net sales - cost of goods sold.
A higher ratio means higher profitability and low ratio means lower profitability.
b) Net Profit Ratio

It is the ratio which shows the relationship between net profit and net sales.
It is also known as net margin.

$$
\mathrm{N} / \text { P Ratio }=\frac{\mathrm{N} / \mathrm{P}}{\text { Net Sales }} \times 100
$$

Ahigh N/P Ratio indicates higher profitability and a low ratio means lower profitablity.

## (c) Operating Ratio

It is the ratio which shows the relationship between total operating cost and Net sales.

$$
\text { Operating Ratio }=\frac{\text { Cost of Goods sold }+ \text { Operating expenses }}{\text { Net sales }} \times 100
$$

A low operating ratio shows operating efficiency of the business and a high operating ratio shows operating inefficiency of business.

## (d) Operating Profit Ratio

It is the ratio which shows the relationship between operating profit and Net sales.

$$
\text { Operating Profit Ratio }=\frac{\text { Operating Profit }}{\text { Net sales }} \times 100
$$

It shows the operating efficiency of the busines. A high ratio shows higher efficiency.

$$
\begin{aligned}
\text { Operating Profit }= & \text { Net Profit }+ \\
& \text { Non-operating expenses - } \\
& \text { Non-operating Income }
\end{aligned}
$$

(or)

Operating Profit $=$ Gross Profit + Operating Income Operating expense

