

മികവ്

പഠന സഹായി

ഹയർ സെക്കണ്ടറി

അക്കൗണ്ടൻസി



ജില്ലാ പഞ്ചായത്ത്, കാസർഗോഡ്

2013-14

മിതവ് 2014

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മുഖമൊഴി

ഗുണനിലവാരമുള്ള വിദ്യാഭ്യാസം ഓരോ കുട്ടിയുടെയും അവകാശമാണ്. അത് ഉറപ്പു വരുത്തുക എന്നത് നമ്മുടെ കർത്തവ്യമാണ്. വിദ്യാർത്ഥികളുടെ പഠനനിലവാരം മികവുറ്റതാക്കുവാനുള്ള യത്നങ്ങൾ എല്ലാ സ്കൂളുകളിലും നടപ്പിലാക്കി വരുന്നത് ഏറെ സന്തോഷകരമാണ്. ഹയർ സെക്കണ്ടറി വിദ്യാർത്ഥികളുടെ പഠനനിലവാരം ഉയർത്തുവാൻ കാസറഗോഡ് ജില്ലാ പഞ്ചായത്തിന്റെ നേതൃത്വത്തിൽ നടപ്പിലാക്കിവരുന്ന മികവ് പദ്ധതി ജില്ലയിലെ ഹയർ സെക്കണ്ടറി വിജയശതമാനം ഗണ്യമായ രീതിയിൽ ഉയർത്തുവാനും ജില്ലയുടെ വിദ്യാഭ്യാസ പിന്നോക്കാവസ്ഥ ഒരു പരിധിവരെ പരിഹരിക്കുവാനും സഹായിച്ചിട്ടുണ്ട്. ഹയർ സെക്കണ്ടറി പരീക്ഷയ്ക്കുള്ള മുന്നൊരുക്ക പ്രവർത്തനങ്ങൾ എല്ലാ സ്കൂളുകളിലും നടന്നുവരുന്ന ഈ സന്ദർഭത്തിൽ കുട്ടികളിൽ ആശയങ്ങൾ കൂടുതൽ ദൃഢീകരിക്കാൻ ഉതകുന്ന, അധ്യാപകർക്ക് സഹായകമായ ഒരു കൈപുസ്തകം ‘**മികവ് 2014**’ കാസറഗോഡ് ജില്ലാ പഞ്ചായത്ത് ഈ വർഷവും പുറത്തിറക്കുകയാണ്. ചോദ്യങ്ങൾ, ചർച്ചകൾ, ചെറു ഗ്രൂപ്പ് പ്രവർത്തനങ്ങൾ തുടങ്ങിയവയിലൂടെ ഇത് സാധിക്കുമെന്നു ഞങ്ങൾ വിശ്വസിക്കുന്നു. താഴ്ന്ന നിലവാരമുള്ള കുട്ടികൾക്കും ഉയർന്ന നിലവാരമുള്ള കുട്ടികൾക്കും ഒരു പോലെ ഗുണകരമാകുന്ന വ്യത്യസ്ത നിലവാരത്തിലുള്ള പഠന പ്രവർത്തനങ്ങൾ ഇതിൽ ഉൾപ്പെടുത്താൻ ഞങ്ങൾ ശ്രദ്ധിച്ചിട്ടുണ്ട്. ഈ വർഷം ജില്ലയിലെ മുഴുവൻ കുട്ടികളെയും C+ നു മുകളിലുള്ള ഗ്രേഡുകളിലേക്ക് ഉയർത്തുക എന്ന നമ്മുടെ ലക്ഷ്യം സാക്ഷാത്കരിക്കാൻ ഇത് സഹായകമാകുമെന്ന് ഞങ്ങൾ പ്രത്യാശിക്കുന്നു. അതിനായി ജില്ലയിലെ മുഴുവൻ പ്രധാന അധ്യാപകരുടെയും, അധ്യാപകരുടെയും, കുട്ടികളുടെയും, രക്ഷിതാക്കളുടെയും നാട്ടുകാരുടെയും ആത്മാർത്ഥമായ സഹകരണവും പിന്തുണയും പ്രതീക്ഷിച്ചുകൊണ്ട്,

പ്രസിഡണ്ട്

ജില്ലാ പഞ്ചായത്ത്, കാസറഗോഡ്.

ACCOUNTANCY

Resource Team :

- 1) Rajesh R., HSST (Com.), CJHSS Chemmnad
- 2) Sathish K.V., HSST (Com.), CHSS Chattanchal
- 3) Sajeevan E., HSST (Com.), GHSS Udinoor
- 4) Prakashan K., HSST (Com.), GHSS Pilicode
- 5) Vinayachandran E.V., HSST (Com.), GHSS Bella East

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 & L Appropriation Account

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

Format of a P&L Appropriation Account

Dr. P&L Appropriation A/c. Cr.

Particulars	Rs.	Particulars	Rs.
P&L A/c	xxxx	P&L A/c	xxxx
(Net loss, if any)		(Net profit)	
Interest on capital		Interest on Drawings	
A - xxx		A- xxx	
B - <u>xxx</u>	xxxx	B- <u>xxx</u>	xxxx
Partner's Salary	xxxx	Capital A/c	
Partner's Commission	xxxx	(Share of loss)	
		A-xxx	
		B-xxx	xxxx
Capital A/c			
(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		P & L A/c	24000
A-4000		Interest on Drawings	
B- <u>3000</u>	7000	A - 1200	
A's Salary	3000	B - <u>600</u>	1800
B's Commission	5000		
Profit transfered to			
Capital A/c (Balancing figure)			
A - 6480			
B - 4320	10800		
	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 i.e capital A/c & current A/c.	1. Only one A/c is prepared i.e capital A/c.
2. Balance in capital A/c remains the same	2. Balance in capital A/c fluctuates.
3. All adjustments like interest or capital, interest on drawings etc are made in current A/c.	3. All adjustments are made in the capital A/c. itself.
4. Both the capital & current A/c balance appears in the balance sheet.	4. Only capital A/c balance appears in the balancesheet.

I. Format of Fixed Capital A/c method

Dr.		Capital A/c		Cr.	
Particulars	A Rs.	B Rs.	Particulars	A Rs.	B Rs.
Cash	xx	xx	Balance b/d	xxx	xxx
(capital withdrawn if any)			cash	xx	xx
Balance c/d	xxx	xxx			
	xxxx	xxxx		xxxx	xxxx

Current A/c

Particulars	A	B	Particulars	A	B
Drawings	xxx	xxx	Balance b/d	xxxx	xxx
Interest on drawings	xxx	xxx	(opening balance)		
P&L appropriation A/c (share of loss, if any)	xxx	xxx	Interest on capital	xxx	xxx
			Salary	xxx	xxx
			Commission	xxx	xxx
			P&L Appropriation A/c	xxx	xxx
Balance c/d	xxxx	xxxx	(share of profit)		
	xxxx	xxxx		xxxx	xxxx

II. Format of fluctuating capital a/c method

Capital A/c

Particulars	A	B	Particulars	A	B
Drawings	xxxx	xxxx	Balance b/d or cash	xxxx	xxx
Interest on drawings	xxxx	xxxx	Interest on capital	xxx	xxx
P&L Appropriation A/c (share of loss, if any)	xxxx	xxxx	Salary	xxx	xxx
			Commission	xxx	xxx
			P&L Appropriation A/c		
			(share of profit)	xxx	xxx
balance c/d	xxxx	xxxx			
	xxxx	xxxx		xxxx	xxxx

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

I Fixed Capital Method

Capital A/c.

Particulars	A	B	Particulars	A	B
			Cash	40000	30000
Balance c/d	40000	30000			
	40000	30000		40000	30000

Current A/c

Particulars	A	B	Particulars	A	B
Drawings	10000	5000	Balance b/d	-	-
Interest on Drawings	1200	600	Interest on capital	4000	3000
			Salary	3000	-
			Commission	-	5000
			P&L Appropriation a/c (share of profit)	6480	4320
Balance c/d	2280	6720			
	13480	12320		13480	12320

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
			P&L Appropriation A/c (share of profit)	6480	4320
Balance c/d	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

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

3. Fixed amount withdrawn in the

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

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 × No. of years purchase

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

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

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

$$\begin{aligned}\text{Goodwill} &= 2 \text{ years purchase of 3 years Avg Profit} \\ &= 2 \times 30000 = 60000/-\end{aligned}$$

2. Super Profit Method

Super Profit equals Excess of actual average profit over normal or standard profit

$\text{Super Profit} = \text{Actual Avg Profit} - \text{Normal Profit}$

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 x 10% = 15000
3. Super Profit = Average Profit - Normal Profit
= 30000 - 15000
= 15000
- Goodwill = Super Profit x No. of Years Purchase
= 15000 x 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

$$\text{Goodwill} = \text{Capitalized value of Average Profit} - \text{Net Tangible Assets.}$$

Need to Calculate

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

$$= \text{Average Profit} \times \frac{100}{\text{Normal rate of return}}$$

- 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

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

$$\text{Net Tangible Assets} = 250000 - 75000 = 175000$$

$$\text{Capitalised value of average profit} = 30000 \times \frac{100}{10} = 300000$$

$$\therefore \text{goodwill} = 300000 - 175000 = 125000$$

B. Capitalisation of Super Profit

Need to calculate

- 1) Average Profit
- 2) Net Tangible Assets
- 3) Normal Profit
- 4) Super Profit

$$5) \text{ Goodwill} = \text{Super Profit} \times \frac{100}{\text{Normal rate of return}}$$

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

$$\text{Average Profit} = 30000$$

$$\text{Net Tangible Asset} = 175000$$

$$\text{Normal Profit} = 175000 \times 10\% = 175000$$

$$\text{Super Profit} = 30000 - 17500 = 12500$$

$$\text{Goodwill} = 12500 \times \frac{10}{1000} = 125000$$

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. Capital Adjustments.

Profit Ratios

Old Ratio (O/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 1/6th 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) Revaluation A/c.
- 2) Capital A/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 A/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 $\frac{3}{5} : \frac{2}{5}$

Total share = 1

C's share = $\frac{1}{6}$

Balance share for A & B = Total – C's share i.e.,
= $1 - \frac{1}{6} = \frac{5}{6}$

A's new share = $\frac{5}{6} \times \frac{3}{5} = \frac{15}{30}$

B's new share = $\frac{5}{6} \times \frac{2}{5} = \frac{10}{30}$

C's share = $\frac{1}{6}$ or $\rightarrow \frac{5}{30}$

(To convert 1/6th in to new share, multiply both numerator and denominator by same factor)

$$\text{ie, } \frac{1}{6} \times \frac{5}{5} = \frac{1 \times 5}{6 \times 5} = \frac{5}{30}$$

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

2. Calculation of Sacrificing Ratio (S/R)

Sacrificing ratio : Old Ratio – New Ratio

Old Ratio of A & B = 3:2

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

$$A's\ S/R = 3/5 - 3/6 = \frac{18-15}{30} = \frac{3}{30}$$

$$B's\ S/R = 2/5 - 2/6 = \frac{12-10}{30} = \frac{2}{30}$$

S/R = 3:2

3. Preparation of Revaluation A/c

Revaluation A/c

To claim for O/S bill	500	By Stock	1000
A: 1800		By Buildings	2500
B: 1200	3000		
	3500		3500

CAPITAL A/C

	A	B	C		A	B	C
To P&LA/c (O/R)	3000	2000	-	Balance b/d	30000	10000	-
				By Cash	-	-	25000
				By Cash (Good will) (S/R)	4800	3200	
				By Reserve (O/R)	9000	6000	
				By Revaluation (O/R)	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:

Sl. No	Cases	Sacrificing Ratio
1.	A and B are partners 3:2 (old ratio) C is admitted with 1/6th share calculate S/R	3:2 O/R = S/R
2.	A,B are partners in the ratio of 3:2 C is admitted as new partner with 1/6th 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 who acquire 1/15 from A and 2/15 from B	1:2
4.	But if old ratio and new ratio are given the sacrificing ratio should be calculated	1:2 O/R - N/R

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

1. Revaluation A/c

Particulars	Amount	Particulars	Amount
Decreased value assets	xxx	Increased value of asset	xxx
increased		Decreased value of	xxx
value of liability	xxx	Liability	

- Revaluation profit should be credited to capital account of old partner in O/R.
- Revaluation losses should be debited to capital account of old partners in O/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	50000	
		Less Provision	<u>2000</u>	48000

Provide 5% provision on debtors:

Revaluation A/c

To provision	500		
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III. Balance Sheet before admission

		Debtors	50000	
		Less Provision	<u>2000</u>	48000

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&L Account	10000

Capital A/c

	Old Partner	Old Partner	New		Old	Old	New
P&L A/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 Dr.

To old partners capital a/c.

2. When new partner does not bring amount goodwill in cash.

New partner capitalDr.

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 $\cancel{5} : 3 : 2$)
- 2) If B retires, A's and C's new ratio will be 5:2 (ie $5 : \cancel{3} : 2$)
- 3) If C retires A's and B's new ratio will be 5:3 (ie $5 : 3 : \cancel{2}$)

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 A&C. Calculate the new profit sharing ratio and A and C.

i) Calculation of gain share

$$\text{A takes share of B} = \frac{1}{2} \times \frac{4}{12} = \frac{4}{24} = \frac{1}{6}$$

$$\text{C takes share of B} = \frac{1}{2} \times \frac{4}{12} = \frac{4}{24} = \frac{1}{6}$$

ii) Calculation of new profit sharing ratio.

New share = Old + Gain

$$\text{A's new share} = \frac{5}{12} + \frac{1}{6} = \frac{5+2}{12} = \frac{7}{12}$$

$$\text{C's new share} = \frac{3}{12} + \frac{1}{6} = \frac{3+2}{12} = \frac{5}{12}$$

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

X, 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, B & C's gaining ratio = 3 : 1

ii. When B retires, A & C's gaining ratio = 4 : 1

iii. When C retires, A & B's gaining ratio = 4 : 3

ii. New ratio is given

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

Solution

Gaining ratio = New ratio - Old ratio

$$\text{A's gain} = \frac{1}{2} - \frac{15}{32} = \frac{16-15}{32} = \frac{1}{32}$$

$$\text{B's gain} = \frac{1}{2} - \frac{9}{32} = \frac{16-9}{32} = \frac{7}{32}$$

∴ Gaining ratio = 1:7

iii. Gaining ratio expressly given

A, 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:

$$\text{B's gain} = \frac{3}{5} \text{ of } \frac{3}{6} = \frac{9}{30}$$

$$\text{C's gain} = \frac{2}{5} \text{ of } \frac{3}{6} = \frac{6}{30}$$

∴ Gaining ratio = 9 : 6 = 3 : 2

New Ratio

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

$$\text{C's new share} = \frac{1}{6} + \frac{6}{30} = \frac{5}{30} + \frac{6}{30} = \frac{11}{30}$$

∴ 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 sacrifice a part of their profit infavour of new partner.	a) The ratio in which continuing partners have acquired the share from the outgoing partner.
b) It is calculated at the time of admission	b) It is calculated at the time of retirement or death.
c) Old Ratio - New Ratio	c) New Ratio - Old Ratio

7. Entry for the treatment of goodwill

Gaining partner's/Remaining partner's capital..... Dr.

Retiring / deceased partner's capital A/c.

8. Revaluation A/c

Dr.		Revaluation A/c		Cr.	
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 capital a/c	xxxx	transferred to partner's capital a/c.		xxxx	
	xxxxxx			xxxxxx	

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

- a) Reserve A/c.....Dr
 General Reserve A/c.....Dr
 P&L A/c..... Dr
 All Partner's capital A/c.
 (Distributed among all partners in their old ratio)

Dr.			Partner's Capital A/c			Cr.		
Particulars	X	Y	Particulars	X	Y			
			Reserve/General Reserve /P&L A/c etc	xxx	xxx			

- b) P&L in the Asset side (i.e. Accumulated loss)
 Partner's capital A/c.....Dr.
 P&L A/c

Dr.			Partners' Capital A/c.			Cr.		
Particulars	X	Y	Particulars	X	Y			
P&L	xxx	xxx						

10. Settlement of retiring partner's capital A/c.

- a) If balance paid immediately
 Retiring partner's capital A/c.....Dr
 Cash/Bank
- b) If the amount transferred to Loan A/c
 Retiring partne'rs capital A/c.....Dr
 Retiring Partner's Loan A/c.

11. Adjustment of capital a/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 A/c)

Partner's Capital A/c.....Dr.

Cash

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

Cash A/c.....Dr.

Partner's captial A/c.

12. A comprehensive problem from Retirement chapter

The balance sheet of A B 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 transferring the balance in B's capital A/c to his loan A/c.

Solution:

a) Gaing ratio

$$\begin{aligned} \text{old ratio} &= 20000:15000:15000 \\ &= 20 : 15 : 15 \\ &= 4 : 3 : 3 \end{aligned}$$

New ratio = 3 : 2

∴ Gaining ratio = New ratio - Old ratio

$$\text{A's G/R} = \frac{3}{5} - \frac{4}{10} = \frac{6-4}{10} = \frac{2}{10}$$

$$\text{C's G/R} = \frac{2}{5} - \frac{3}{10} = \frac{4-3}{10} = \frac{1}{10}$$

∴ G/R of A & C = 2 : 1

Journal of A, B & C

Date	Particulars	L/F	Debit	Credit
	Revaluation A/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
	(Increase in the value of assets)			
	A's Capital A/c.Dr.		350	
	B's Capital A/c.....Dr.		263	
	C's Capital A/c.....Dr.		262	
	Revaluation A/c.			875
	(Transfer of Revaluation loss to 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 10000x3/10=3000)			

	A/s Capital A/c.....Dr. C's Capital A/c.....Dr. Cash (Excess capital withdraw by A&C)		750 2563	3313
	B's Capital A/c.....Dr. B's Loan A/c (Transfer B's balance to his loan a/c)		18562	18562

Revaluation A/c

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

Capital A/c

Dr.				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 (Shared 30000 in the 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	Factory Building	13440
Reserve for legal charges	265	Sundry Debtors	9500
Creditors	10000	Bills Receivables	7000
B's Loan A/c	18562	Stock 5500	
Capital A/c		Less. Decreciation 1550	13950
A's - 18000		Planth & Machinary	11500
C's - 12000	30000	Bank Balance	9687
		(13000-3313)	
	65077		65077

13. Partners' Loan A/c

Partners' Loan A/c

Dr

Cr

Particulars	Amount	Particulars	Amount
Cash (Instalment + interest)	xxxx	Retiring partners' Capital A/c (total amount of Loan)	xxxx
Balance c/d	xxxx	Balance b/d	xxxx
Cash (Instalment + integration)	xxxx		xxxx
Balance c/d	xxxx	Balance b/d	xxxx

$$\text{One instalment amount} = \frac{\text{Total Loan amount}}{\text{No. of instalments}}$$

$$\text{Interest Calculation} = \text{Balance b/d amount} \times \frac{\text{Rate}}{100}$$

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 A/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 A/c. This item P & L Suspense A/c. also to be shown in the Asset side of Balance Sheet.

Chapter - 4

DISSOLUTION OF A 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

Dissolution of Partnership	Dissolution of firm
<ul style="list-style-type: none"> ◆ Business will not be closed ◆ Assets and liabilities are revalued ◆ New balance sheet is prepared ◆ Dissolved on mutual agreement and no role for court. ◆ Economic relationship continuous with change. ◆ Books of accounts will continue 	<ul style="list-style-type: none"> ◆ Business will be closed ◆ Assets are realised and liabilities are paid off ◆ No balance sheet is prepared ◆ Can also be dissolved by the order of the court. ◆ Economic relationship comes to an end. ◆ All books of accounts are closed.

Difference between Revaluation account & Realisation account

Revaluation Account	Realisation Account
<ul style="list-style-type: none"> ◆ Prepared at the time of admission, death and retirement of partner ◆ Prepared to show assets and liabilities at their revised values in order to ascertain profit or loss ◆ Prepared many times during the life time of the firm. ◆ Shown only items having increase or decrease in values. ◆ No expenses are shown ◆ Firm will continues even after its preparation 	<ul style="list-style-type: none"> ◆ Prepared at the time of dissolution ◆ Prepared at the time of dissolution to ascertain profit or loss on sale of asset and payment of liabilities. ◆ Prepared only once ◆ Assets and liabilities are shown at their book value ◆ Realisation expenses are shown ◆ Firm closes it's business after its preparation.

M, N, 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 Capital A/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.	M	N	P		M	N	P	Cr.
Realization	1000	750	750	By Balance b/d	60000	48000	24000	
Realization (Furniture)	8500			By Realisation A/c. N's brother's loan A/c.	-	16000	-	
Bank	58500	69250	29250	By Reserve	8000	6000	6000	
	68000	70000	30000		68000	70000	30000	

Cash/Bank A/c

Dr.			Cr.
To Balance b/d	41000	By Realization (cr. paid)	30000
To Realisation	158000	By Realization (liability)	8000
		Realization (Rel. exp)	4000
		By M's Capital	58500
		By N's Capital	69250
		By P's Capital	29250
	199000		199000

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

Cash Dr.
 To Realisation

2. Unrecorded liability paid off

Realisation Dr.
 To cash

3. When partner takes over assets/liability

Partner's Capital 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 preferencial rights.	Equity share is the share not a preference share
1. Preference to get dividnt	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 dividnt
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..... Dr. [No.of application received × Application money per share]
 To share application a/c.
- ii. To transfer application money to share capital
Share application A/c..... Dr.
 To share capital
- iii. When allotment money due
Share allotment A/c..... Dr [No.of share allotted × allotment money per share]
 To share capital
- iv. On receipt of allotment money
Bank A/c.....Dr. [No. of shares allotted × allotment money per share]
 To share allotment
- v. When call money is due
Share call A/c.....Dr [No of share allotted × call money per share]
 To share capital
- vi. On receipt of call money
Bank A/c.....Dr.
 To share call A/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.....Dr

To calls in advance. (Advance amount received)

Then call money is received

Bank A/c.....Dr - actual amount received

Calls in advance A/c.....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.....Dr

To share holders A/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 A/c.....Dr

To share holders A/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/- on 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 a/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 of bonus shares
- Paying premium of shares and debentures
- To write off preliminary expense
- To write off discount on issue of shares and debentures.

Journal Entry

1. If premium amount is collected with application

- i) Bank A/c.....Dr (application money + premium)
 To share application A/c
- ii) Share application A/c.....Dr (application money + premium)
 To share capital (application money only)
 To securities premium (premium amount only)

2. If premium amount is collected along with allotment money

- i) Share allotment A/c.....Dr (allotment + premium)
 To share capital (allotment money only)
 To Securities premium (premium amount collected)
- ii) Bank A/c.....Dr (Allotment money + premium)
 To share allotment A/c (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 a/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.....Dr
Discount on issue of shares A/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/- $100 \times 10 / 100$) 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	
(100x30)		30000
Discount on issue A/c.....	Dr	
(100x10)		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 capital A/c.....Dr (called up)
 To share forfeited A/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.....Dr (called up)
Securities premium A/c.....Dr (Amount of premium)
 To share forfeited A/c (paid)
 To Allotment / call A/c (unpaid)

3. Forfeiture of shares issued at discount

Share capital A/c..... Dr	(called up)
To share forfeited A/c	(amount paid)
To discount on issue of shares	(discount)
To allotment/call A/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

X Ltd 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 on such shares by the original share holders.
- Balance on share forfeited a/c after re-issue transferred to capital reserve a/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.....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 A/c.....Dr	2
To Debenture	10

ii) At the time of redumption

Debenture A/c.....Dr	10
Premium on redemption A/c..... Dr	2
To Bank A/c	12

Question No. 1

Ltd issued the following debentures

- 10% Debentures of Rs. 100000 issued as par and redeemable at par
- 10% Debentures of Rs. 100000 issued at a discount of 10%. but redeemable at par.
- 10% Debentures of Rs. 100000 issued at premium of 10% but redeemable at par.
- 10% Debentures of Rs. 100000 issued at par but redeemable at a premium of 10%
- 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 (Debentures issued as collateral security)	xxx		

Ind 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 a/c is shown on the asset side of the balance sheet.

Balance Sheet

Liability	Amount	Asset	Amount
Bank loan	xxx	Debenture suspense	
% Debentures	xxx	A/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 FINANCIAL STATEMENT

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 P & L A/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 :		
Interest paid	50000	60000
Income tax	140000	160000

Solution :**Comparative Income Statement**

Particulars	2009 Amount	2010 Amount (decrease	Absolute Increase (decrease)	*Percentage Increase
Net Sales	1570000	1800000	230000	14.65
Less : Cost of Goods sold	900000	1000000	100000	11.11
Gross profit	670000	800000	130000	19.40
Less : Operating expenses :				
General and Admn. expenses	140000	144000	4000	2.80
Selling Expenses	160000	180000	20000	12.50
Operating profit	370000	476000	106000	28.65
Less : Interest paid	50000	60000	10000	20.00
Net profit beofre tax	320000	416000	96000	30.00
Less : Income tax	140000	160000	20000	14.28
Net profit after tax	180000	256000	76000	42.22

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

Form of Company Balance Sheet

Liabilities	Amount	Assets	Amount
(1) Share Capital		(1) Fixed Assets	
Authorised Capital		Goodwill	x x x
..... shares		Patent & trade mark	x x x
of Rs. each	x x x	Live stock (കന്നുകാലി)	x x x
Issued subscribed,		Land	x x x
called up & paid up		Buildings	x x x
capital		Lease holds	x x x
..... shares of Rs. each	x x x	Plant & Machinery	x x x
		Furnitures & Fittings	x x x
		Vehicles etc.	x x x
(2) Reserves & Surplus		(2) Investments	
(ലാഭവും മാറ്റിവെച്ച തുകയും)		(നിക്ഷേപം)	
Capital Reserves	x x x	Investments in shares,	
Security premium	x x x	debentures, Govt.	
Other Reserves	x x x	securities etc.	x x x
P & L A/c (ലാഭം)	x x x		
Sinking Fund	x x x		
(3) Secured Loans		(3) Current Assets,	
(security ഉള്ള കടങ്ങൾ)		Loans & Advances	
Debentures	x x x	(a) Current Assets	
Loans & advances		Interest accrued	x x x
from banks &		Stores & spare parts	x x x
other institutions	x x x	Loose tools	x x x
(4) Unsecured Loans		stock-in-trade	x x x
(Security ഇല്ലാത്ത കടങ്ങൾ)		work-in-progress	x x x
Fixed deposit	x x x	Sundry debtors	x x x
Loans & advances	x x x	Cash in hand	x x x
from subsidiaries		Bank balance	x x x
(5) Current Liabilities		(b) Loans & Advances	
& Provisions		(കടമായി കൊടുത്തത്)	
(a) Current Liabilities		Bills Receivable	x x x
Bills payable	x x x	prepaid expense	x x x
Sundry creditors	x x x		
Income received		(4) Miscellaneous	
in advance	x x x	Expenditure	
O/s expenses	x x x	Preliminary expenses	x x x
Unclaimed dividends etc.	x x x	(പ്രാരം ചെലവുകൾ)	
(b) Provision		Expense/Commission/	
Provision for taxation	x x x	Brokerage on issue of	
proposed dividend	x x x	shares or debantures	x x x
		Discount on issue of shares	x x x
		(5) Profit and Loss A/c.	
	x x x		x x x

(1) Proforma of Comparative Income Statement

Particulars	Base year (previous) Amount	Current year Amount	Absolute increase (decrease)	Percentage increase (decrease)
Sales	x x x	x x x		
Less : Sales Returns	x x x	x x x		
Net Sales	x x x	x x x		
Less : Cost of Goods sold	x x x	x x x		
Gross profit	x x x	x x x		
Less : Operating expenses	x x x	x x x		
Operating profit	x x x	x x x		
Less : Non-operating expenses	x x x	x x x		
Add : Non-operating incomes	x x x	x x x		
Net profit before tax	x x x	x x x		
Less : Income tax	x x x	x x x		
Net profit after tax	x x x	x x x		

- (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	2010	2011	Assets	2010	2011
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
	1600000	2100000		1600000	2100000

Comparative Balance Sheet

Particulars	2010 Amount	2011 Amount	Amount Increase (decrease)	Percentage Increase (decrease)
Sources of Funds				
Share capital	800000	1000000	200000	25
Reserves & Surplus	300000	400000	100000	33.33
Debentures	200000	300000	100000	50
Sundry creditors	240000	360000	120000	50
Bills payable	60000	40000	(20000)	(33.33)
Total of Capital & Liabilities	1600000	2100000	500000	31.25
Application of funds				
Fixed Assets :				
Plant and Machinery	600000	540000	(60000)	(10)
Furniture & Fixtures	40000	60000	20000	50
Current Assets :				
Cash and Bank	160000	300000	140000	87.50
Bills Receivable	100000	200000	100000	100
Debtors and Stock	700000	1000000	300000	42.88
Total Assets	1600000	2100000	500000	31.25

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 $(\frac{500}{500} \times 100)$
less: cost of sales	325	65 $(\frac{325}{500} \times 100)$
Gross profit	175	35
less: Operating expenses		
office expenses	20	4
Selling expenses	30	6
Operating profit	125	25
less: Non-operating expenses		
Interest	25	5
Net profit	100	20

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	8,00,000		8,00,000

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	8,00,000	100

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.

$$\text{Trend percentage} = \frac{\text{Current year Amt}}{\text{Base year Amt}} \times 100$$

- 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 term 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.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

or (working capital Ratio)

Current Assets - Cash ഉം Cash ആക്കി എളുപ്പത്തിൽ മാറ്റാൻ പറ്റുന്ന Assets ഉം

- (i) Cash in hand
 - (ii) Cash at bank
 - (iii) Bills Receivable
 - (iv) Sundry Debtors/trade Debtors
 - (v) Stock / Inventory
 - (vi) Accrued income (കിട്ടാനുള്ള വരുമാനം)
 - (vii) Prepaid Expenses (മുൻകൂട്ടി കൊടുത്ത Expense)
 - (viii) Short term investment / Marketable securities/ temporary investments/ trade investments.
- വെറും investment എന്ന് പറയാന്പോൾ L.T investment അതായത് fixed Asset ആണ്.
 - Sundry Debtore ഉം Bills Receivable ഉം കൂടി Accounts Receivable എന്ന് പറയുന്നു.

- Current Liabilities - പെട്ടെന്ന്, അതായത് 1 വർഷത്തിനുള്ളിൽ തിരിച്ചുകൊടുക്കേണ്ട Liabilities.
 - (i) Bills payable (കൊടുക്കാനുള്ള bill)
 - (ii) Sundry creditors (കടത്തിൽ വാങ്ങിയതിനാൽ കൊടുക്കാനുള്ള തുക)
 - (iii) Bank overdraft (ബാങ്കിൽ നിന്ന് അധികം പിൻവലിച്ചത്)
 - (iv) Short term loans
 - (v) Outstanding Expenses / Expenses payable.
 - (vi) Income received in advance (മുൻകൂട്ടി കിട്ടിയ തുക)
 - (vii) Provision for tax (tax കൊടുക്കാൻ മാറ്റി വെച്ചത്)
 - (viii) Proposed dividend (നിർദ്ദിഷ്ട dividend)

b) Quick Ratio (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
Dabtores	- 20,000	Prepaid expense	- 300
Creditore	- 20,000	outstanding expenses	- 2000

(a) $\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$

(b) $\text{Current Assets} = \text{Cash at bank} + \text{Debtors} + \text{Stock} + \text{Prepaid Expenses}$
 $= 15,000 + 20,000 + 14,000 + 3000 = 52,000$

$\text{Current Liabilities} = \text{creditore} + \text{outstanding Expenses}$
 $= 20,000 + 2000 = 22,000$

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

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

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. L = 22,000

$$\text{Liquid Ratio} = \frac{35,000}{22,000} = 1.59 : (\text{or}) 1.59$$

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 C R = 2.5

Q R = 1.5

C L = 60,000

$$C R = \frac{CA}{CL}$$

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

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

Current Assets = 1,50,000

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

$$\frac{X}{60,000} = 1.5$$

$$X = 60,000 \times 1.5 = 90,000$$

Quick Assets = 90,000

inventory (Stock) = C A - Q A

$$= 1,50,000 - 90,000 = \text{Rs. } 60,000$$

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 = CA - CL

CL be x

CA = 2.5 x

$$2.5x - x = 1,20,000$$

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

$$x = \frac{1,20,000}{1.5} = 80,000$$

$$C.L = 80,000$$

$$C.A = 2.5x$$

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

$$\text{Stock} = C.A - Q.A$$

$$Q.R = \frac{Q.A}{C.L}$$

$$\frac{Q.A}{80,000} = 1.5$$

$$Q.A - 80,000 \times 1.5 = 1,20,000$$

$$\text{Stock} = 2,00,000 - 1,20,000 = 80,000$$

(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) Proprietary 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.

$\text{Interest coverage Ratio} = \frac{\text{profit before interest \& tax}}{\text{Interest}}$

(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.

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

Debt includes-

- i) Debentures
- ii) L.T Loans (Term Loan, Mortgage 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) P&L (Cr) balance

$$\text{Equity} = \text{Share capital} + \text{Reserves \& Surplus} - \text{Fictitious Assets \& Losses.}$$

c. Proprietary 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.

$$\text{Proprietary Ratio} = \frac{\text{Proprietary fund (equity)}}{\text{Total Assets}}$$

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

Balance sheet as on 31st dec.2010

Liabilities	Amount	Assets	Amount
Equity share capital	200000	Land & Building	150000
Preference share capital	200000	Plant & Machinery	250000
General Reserve	80000	Furniture	50000
P&L A/c	40000	Stock	150000
12% Debentures	220000	Debtors	70000
Creditors	100000	Bills receivable	80000
Bills payable	50000	Cash at bank	100000
		Cash in hand	40000
	890000		890000

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

Debt = 12% debentures = 220000

$$\begin{aligned}
 \text{Equity} &= \text{Equity share capital} + \text{preference share capital} \\
 &\quad \text{General reserve} + \text{Profit \& Loss A/c.} \\
 &= 200000 + 200000 + 80000 + 40000 \\
 &= 520000 \\
 \text{Debt - Equity Ratio} &= \frac{220000}{520000} = 0.42 : 1
 \end{aligned}$$

b. Proprietary Ratio = $\frac{\text{Shareholders fund (equity)}}{\text{Total assets}}$

$$\begin{aligned}
 \text{Shareholders fund (or) equity} &= 520000 \\
 \text{Total Assets} &= 890000
 \end{aligned}$$

$$\text{Proprietary Ratio} = \frac{520000}{890000} = 0.58 : 1$$

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 of sales. A high 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

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\text{COGS} = \text{Sales} - \text{G/P} = 330000 - 90000 = 240000$$

$$\text{or } [\text{COGS} = \text{Op. stock} + \text{purchases} + \text{wages} + \text{carriage} - \text{closing stock}]$$

$$= 80000 + 200000 + 20000 + 10000 - 70000 = 240000$$

$$\text{Avg stock} = \frac{\text{Opening stock} + \text{closing stock}}{2} = \frac{80000 + 70000}{2} = 75000$$

$$\text{Inventory turnover ratio} = \frac{240000}{75000} = 3.2 \text{ times}$$

- b. Debtors turnover ratio/debtors velocity/Receivable turnover ratio
It is the ratio which shows the relationship between credit sales and average accounts receivable.

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit sales}}{\text{Avg accounts receivable}}$$

i.e.,
$$\frac{\text{Credit Sales}}{\text{Average of debtors \& B/R}}$$

It measures the efficiency of debt collection. A high ratio means prompt repayment of debtors.
Average collection period (or) Debt collection period.

It gives the collection period

$$\text{Debt collection period} = \frac{\text{Days / Months in a year}}{\text{Debtors T/o Ratio}}$$

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

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

$$a) \quad \text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average accounts receivable}}$$

$$\begin{aligned} \text{Credit Sales} &= \text{Total sales} - \text{Cash sales} \\ &= 100000 - 20000 = 80000 \end{aligned}$$

$$\text{Average accounts receivable} = \frac{\text{Op. bal. of debtors \& B/R and Cl. bal. of debtors \& B/R}}{2}$$

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

$$\text{Debtors turnover ratio} = \frac{80000}{22500} = 3.56 \text{ times}$$

$$\begin{aligned} b) \quad \text{Debt collection period} &= \frac{\text{Days in a year}}{\text{Debtors T/o Ratio}} \\ &= \frac{365}{3.56} = 103 \text{ days} \end{aligned}$$

Creditors Turnover Ratio / Payable Turnover Ratio/Creditors velocity

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

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

$$\text{i.e.} \quad \frac{\text{Credit Purchases}}{\text{Average of creditors \& Bills payable}}$$

It measures the promptness in making payment on credit purchases.

Average debt payment period / Debt payment period

$$\text{Debt payment period} = \frac{\text{Days/Month in a year}}{\text{Creditors Turnover Ratio}}$$

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 =

$$\frac{\text{Op. Balance of creditors \& Bills payable and closing balance of creditors \& B/p}}{2}$$

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

Creditors T/o Ratio = $\frac{100000}{20000} = 5 \text{ times}$

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 efficiency 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.

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

G/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.

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

A high N/P Ratio indicates higher profitability and a low ratio means lower profitability.

(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 business. A high ratio shows higher efficiency.

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

(or)

$$\begin{aligned} \text{Operating Profit} &= \text{Gross Profit} + \\ &\quad \text{Operating Income} - \\ &\quad \text{Operating expense} \end{aligned}$$

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