

CHAPTER – 3

RECONSTITUTION – ADMISSION OF A PARTNER

Page No 164:

Question 1: Identify various matters that need adjustments at the time of admission of a new partner.

ANSWER:

The following are the various items that need to be adjusted at the time of admission of a new partner.

1. **Profit Sharing Ratio:** Calculation of new profit sharing ratio.
2. **Goodwill:** Valuation and adjustment of goodwill among the sacrificing old partners.
3. **Revaluation of Assets and Liabilities:** Assets and liabilities are revalued to ascertain the current value of the assets and liabilities of the partnership firm. Moreover, the profit or loss due to the revaluation need to be distributed among the old partners.
4. Accumulated profits, losses and reserves are distributed among the old partners in their old ratio.
5. **Adjustment of capital of the partners.**

Page No 164:

Question 2: Why is it necessary to ascertain new profit sharing ratio even for old partners when a new partner is admitted?

ANSWER:

When new partner/s is/are admitted, then the old partners in the partnership firm need to sacrifice their share of profit in favour of the new

partner/s. This reduces the share of profit of the old partners, hence, it is necessary to ascertain the new profit sharing ratio even for the old partners in the event of admission of new partner/s.

Page No 164:

Question 3: What is sacrificing ratio? Why is it calculated?

ANSWER:

Sacrificing ratio refers to the ratio in which the old partners of a partnership firm surrender their share of profit in favour of the new partner/s. It is calculated as a difference between the old ratio and the new ratio of the old partners.

Sacrificing Ratio = Old Ratio – New Ratio

It is very important to calculate this ratio, as the new partner need to compensate the old partners for sacrificing their share of profit. The new partner compensates the old partners by making payment to them in the form of goodwill that is transferred among the old partners in their sacrificing ratio.

Page No 164:

Question 4: On what occasions sacrificing ratio is used?

ANSWER:

The following are the different situations when sacrificing ratio is used.

1. When the existing partners of a partnership firm agree to change the share of profit among themselves.
2. When a new partner is admitted in the partnership firm and the amount of the goodwill brought by him/her is transferred among the old partners in sacrificing ratio of the old partners.

Page No 164:

Question 5: If some goodwill already exists in the books and the new partner brings in his share of goodwill in cash, how will you deal with existing amount of goodwill?

ANSWER:

If goodwill already appears in the books of old firm (before the admission of new partner), then this should be written off among the old partners in their old profit sharing ratio. The following Journal entry is passed.

Old Partner's Capital A/c	Dr.
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To Goodwill A/c

(Goodwill written off in old ratio among the old partners)

Page No 164:

Question 6: Why is there need for the revaluation of assets and liabilities on the admission of a partner?

ANSWER:

At the time of admission of a new partner, it becomes very necessary to revalue the assets and liabilities of a partnership firm for ascertaining its true and fair values. This is done because the value of assets and liabilities may have increased or decreased and consequently their corresponding figures in the old balance sheet may either be understated or overstated. Moreover, it may also be possible that some of the assets and liabilities are left unrecorded. Thus, in order to record the increase and decrease in the market value of the assets and liabilities, Revaluation Account is prepared and any profits or losses associated with this increase or decrease are distributed among the old partners of the firm.

Question 1: Do you advise that assets and liabilities must be revalued at the time of admission of a partner? If so, why? Also describe how is this treated in the book of account?

ANSWER:

Yes, it is advisable to revalue the assets and liabilities at the time of admission of a new partner for ascertaining the true and fair value of the assets and liabilities. This is done because the value of assets and liabilities may have increased or decreased and consequently their corresponding figures in the old balance sheet may either be understated or overstated. Moreover, it may also be possible that some of the assets and liabilities are left unrecorded. Thus, in order to record the increase and decrease in the market value of the assets and liabilities, Revaluation Account is prepared and any profits or losses associated with this increase or decrease are distributed among the old partners of the firm.

Accounting Entries in the Books of Accounts:

The following Journal entries are recorded in the Revaluation Account on the date of admission of a new partner.

i) For increase in value of assets:

Assets A/c Dr.

To Revaluation A/c

(Increase in the value of assets)

ii) *For decrease in value of assets:*

Revaluation A/c Dr.

To Asset A/c

(Decrease in the value of assets)

iii) ***For increase in liabilities:***

Revaluation A/c Dr.
 To Liabilities
(Increase in the value of liabilities)

iv) ***For decrease in liabilities:***

Liability A/c Dr.
 To Revaluation A/c
(Decrease in the value of liabilities)

v) **For recording of unrecorded assets:**

Unrecorded Assets A/c Dr.
 To Revaluation A/c
(Recording of unrecorded assets)

vi) **For recording of unrecorded liabilities:**

Revaluation A/c Dr.
 To Unrecorded Liabilities A/c
(Recording of unrecorded liabilities)

vii) **For transfer of credit balance of Revaluation Account:**

Revaluation Dr.
 To Old Partner's Capital A/c

(Profit on revaluation is transferred to the Old Partner's Capital Account in their old profit sharing ratio)

Or,

vii) ***For transfer of debit balance of Revaluation Account:***

Old Partner's Capital A/c Dr.

To Revaluation A/c

(Loss on revaluation is transferred to the Old Partner's Capital Account in their old profit sharing ratio)

Page No 164:

Question 2: What is goodwill? What are the factors that effect goodwill?

ANSWER:

Goodwill is an intangible asset of a firm. It is the value of a firm's reputation and its good brand name in the market. A firm earns goodwill by its hard work and thereby winning the blind trust and faith of the customers by fulfilling their demands in both qualitative and quantitative aspects. A positive goodwill helps a firm to earn supernormal profits compared to its competitors that earns normal profits (as their goodwill is zero). In other words, goodwill ensures greater future profits as there will be greater number of satisfied customers in the future. As in the words of Lord Eldon, "Goodwill is nothing more than the probability, that the old customers will resort to the old place."

Characteristics of Goodwill

The following are the characteristics of goodwill.

- 1) It is an intangible asset.
- 2) It is not a fictitious asset.

- 3) It is difficult to ascertain the exact value of goodwill.
- 4) It enhances the future as well as the present earning capacity of a business.
- 5) It helps in earning supernormal profits against the normal profits.
- 6) It assists the business to enjoy its upper hand over its counterparts.

Factors Affecting Goodwill

The following are the important factors that affect the goodwill of a firm.

- 1) **Quality Products:** If a company produces product of the best quality and in large scale, then automatically the company earns more goodwill.
- 2) **Location:** If a business is located at easily reachable and convenient place, then more number of consumers will be attracted again and again which will lead to increase in sales and, therefore, the firm will earn higher goodwill.
- 3) **Management:** Efficient management leads to cost efficiency and increases productivity. If a firm's management is efficient, then superior quality products can be produced at lower cost. These can be sold at lesser price. Superior quality at lower price enables a firm to earn higher goodwill.
- 4) **Market Structure:** If a firm is operating in a monopoly market with no close substitutes, then there will be more goodwill of the firm.
- 5) **Economies of Scale:** If a firm enjoys special advantages like, continuous supply of power, fuel and raw materials at a low price and produces quality product at a large scale, then the firm enjoys higher value of goodwill.

Question 3: Explain various methods of valuation of goodwill.

ANSWER:

The following are the various methods of valuation of goodwill.

1. Average Profit Method: Under this method, goodwill is calculated on the average basis of the profits of past few years. The formula for calculating goodwill is:

Goodwill = Average Profit × No. of Years Purchase

$$\text{Average Profit} = \frac{\text{Total Profit of Past Given Years}}{\text{Number of Yars}}$$

Number of Years Purchase implies number of years for which the firm expects to earn the same amount of profits.

Steps to Calculate Goodwill by Average Profit Method:

Step 1: Ascertain the total profit of past given years.

Step 2: Add all abnormal losses like, loss by fire, theft etc.

Step 3: Add all normal income, if not added previously.

Step 4: Less all non-business incomes and all abnormal gains and incomes like, speculation, lottery etc.

Step 5: Less all normal expenses, if not deducted previously.

Step 6: Calculate Average Profit, by dividing the total profit ascertained in Step 5 by number of years.

Step 7: Multiply the Average Profit to the Number of Year's Purchases to calculate the value of goodwill.

Example:

The profits for last 5 years are 1,00,000, 3,00,000, (2,00,000), 5,00,000, 8,00,000.

Calculate goodwill on the basis of 4 years' purchase

$$\begin{aligned}\text{Average Profit} &= \frac{1,00,000+3,00,000+5,00,000+8,00,000-2,00,000}{5} \\ &= \frac{15,00,000}{5} = \text{Rs. } 3,00,000\end{aligned}$$

$$\text{Goodwill} = 3,00,000 \times 4 \text{ years} = \text{Rs } 12,00,000$$

2. Weight Average Method: It is modified version of the Average Profit Method. Under this method, the weights are assigned for each year's profit. Highest weights are assigned to the recent year's profit and lower weights are assigned to the past year's profits. The products of the profits and the weights are added and divided by the total weights to calculate Weighted Average Profits. The formula for calculating goodwill by this method is:

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

$$\text{Goodwill} = \text{Weighted Average Profit} \times \text{Number of Years Purchase}$$

Steps to Calculate Goodwill by Weight Average Method:

Step 1: Assign highest weights to the recent year's profit and lower weights to the past year's profits, like 4,3,2,1.

Step 2: Multiply the weights with its corresponding year's profits.

Step 3: Calculate the total of the products

Step 4: Divide the total of the product by the total of the weights in order to calculate Weighted Average Profit.

Step 5: Multiply the Weighted Average Profit by the number of years purchase.

For example:

The profits for the last 5 years are Rs 1,00,000, Rs 3,00,000, Rs (2,00,000), Rs 5,00,000, Rs 8,00,000.

Calculate goodwill on the basis of 4 years' purchase

Profit/Loss Rs	Weights	Product Rs
1,00,000	1	$1,00,000 \times 1 = 1,00,000$
3,00,000	2	$3,00,000 \times 2 = 6,00,000$
(2,00,000)	3	$(2,00,000) \times 3 = (6,00,000)$
5,00,000	4	$5,00,000 \times 4 = 20,00,000$
8,00,000	5	$8,00,000 \times 5 = 40,00,000$
Total	15	Rs 61,00,000

$$\text{Weighted Average Profit} = \frac{61,00,000}{15} = \text{Rs. } 4,06,666.67$$

3. Super Profit Method: Under this method, goodwill is calculated on the basis of excess profit earned by a firm over the normal profit earned by its counterparts in the same industry. The excess profit over the normal profit is termed as Super Normal Profit.

Steps to Calculate Goodwill by Super Profit Method:

Step 1: Calculate Average Profit

Step 2: Calculate Average Capital Employed as:

$$\text{Average Capital Employed} = \frac{\text{Opening Capital Employed} + \text{Closing Capital Employed}}{2}$$

Capital employed = All Assets – Goodwill – Fictitious Assets – External Liabilities

Step 3: Calculate Normal Profit by the formula:

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

Step 4: Calculate Super Normal Profit by the formula:

$$\text{Super Normal Profit} = \text{Average Profit} - \text{Normal Profit}$$

Step 5: Multiply the Super Normal Profit by the Number of Years Purchase to calculate goodwill.

4. Capitalisation Method: Under this method, goodwill is calculated by the following two methods:

- a) By capitalisation of Average Profit.
- b) By capitalisation of Super Profit.

a) Capitalisation of Average Profit

Step 1: Calculate Average Profit

Step 2: Calculate Capitalised value of Average Profit by the following formula:

$$\text{Capitalised value of Average Profit} = \text{Average Profit} \times \frac{100}{\text{Normal Rate of Return}}$$

Step 3: Ascertain Actual Capital Employed

Step 4: Deduct Actual Capital Employed from Capitalised Average Profit to calculate goodwill.

$$\text{Goodwill} = \text{Capitalised Average Profit} - \text{Actual Capital Employed}$$

b) Capitalisation of Super Profit

Step 1: Calculate the Capital Employed

Step 2: Calculate Normal Profit by the following formula:

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

Step 3: Calculate Average Profit.

Step 4: Calculate Super Normal Profit by the following formula:

$$\text{Super Normal Profit} = \text{Average Profit} - \text{Normal Profit}$$

Step 5: Calculate goodwill by the following formula:

$$\text{Goodwill} = \text{Super Profit} \times \frac{100}{\text{Normal Rate Return}}$$

Page No 164:

Question 4: If it is agreed that the capital of all the partners be proportionate to the new profit sharing ratio, how will you work out the new capital of each partner? Give examples and state how necessary adjustments will be made.

ANSWER:

When a new partner is admitted, sometimes it is agreed that the capital of all the partners should be proportionate to the new profit sharing ratio. The calculation of the new capital of each partner depends on the following situations:

- 1) When the capital of the new partner is given
- 2) When the total capital of the firm is given.

1) When the capital of the new partner is given

In this situation, the calculation of the new capital of all the partners involves the following steps:

Step 1: The total capital of the new firm is calculated on the basis of new partner's capital.

Step 2: The new capital of each partner is calculated by dividing the total capital of the firm by their individual new profit share.

Step 3: After posting all adjustments and items in the Partners' Capital Account, calculate credit minus debit side of the old Partners' Capital Account.

Step 4: The new capital ascertained in the **Step 2** is written as 'Balance c/d' on the credit side of the Partner's Capital Account.

Step 5: If the amount ascertained in **Step 2** (New capital) exceeds the capital amount ascertained in **Step 3** (Old Capital), then it is termed as 'Deficit' and the difference amount is to be brought in by the old partners. On the contrast, if the amount ascertained in the **Step 2** (New Capital) is lesser than the capital amount ascertained in the **Step 3** (old Capital), then it is termed as 'Surplus' and the difference amount is returned to the old partners.

Let us understand the above steps with the help of an example.

A and B are partners sharing profit and loss equally. They agree to admit C for share in profit. C brings Rs 50,000 as capital. The old capitals of A and B are Rs 60,000 and Rs 40,000 respectively, at the time admission of C.

Step 1: The total capital of the new firm on the basis of C = $50,000 \times \frac{3}{1}$
= Rs 1,50,000

Step 2: A's new capital = $1,50,000 \times \frac{1}{3} = \text{Rs. } 50,000$

B's share in new firm = $1,50,000 \times \frac{1}{3} = \text{Rs. } 50,000$

Step 3:

	A	B
New Capital	50,000	50,000
<i>Less:</i> Existing Capital	(60,000)	(40,000)
Withdrawal (deposit)	10,000	(10,000)

2) When the total capital of the new firm is given:

When the capital of new partner is not mentioned then his/her capital is ascertained on the proportionate basis of total capital of the firm. The amount ascertained is to be brought in by the new partner in the form of his/her portion of capital. In order to ascertain the proportionate capital of the new partner, the following steps are to be followed.

Step 1: Ascertain the total old capital of the old partners (after making all adjustments)

Step 2: Ascertain the total capital of the new firm by multiplying the total of old capitals of the old partners (ascertained in the Step 1) with reciprocal of total share of old partners. That is,

Total Capital of New Firm = Total capital of the Old Partners $\times$ Reciprocal of the Combined New Share of the Old Partners

Step 3: Calculate New Capital of each partner on the basis of Total Capital ascertained in Step 2. That is, multiplying the Total Capital by the new profit sharing ratio individually for all the partners (including the new partner).

Let us understand the above steps with the help of an example.

X and Y are partners in a firm sharing profit and loss equally. They agree to admit Z for $\frac{1}{2}$ rd share in profit and decided to share future profit and loss equally. X's capital is Rs 2,00,000 and Y's capital is Rs 1,50,000. Z brings sufficient capital for his share in profit.

Step 1: Calculation of Total Capital of Old Partners (after all adjustments)

The total capital of the old partners = Rs 2,00,000 + Rs 1,50,000 = Rs 3,50,000

Step 2: Calculation of Total Capital of New Firm

Total Capital of New Firm = Total Capital of the Old Partners

× Reciprocal of the Combined New Share of the Old Partner

Total Capital of New Firm = $3,50,000 \times \frac{3}{2} = \text{Rs. } 5,25,000$

Step 3: Calculation of New Capital of Each Partner

X's (New) Capital = $5,25,000 \times \frac{1}{3} = \text{Rs. } 1,75,000$

Y's (New) Capital = $5,25,000 \times \frac{1}{3} = \text{RS. } 1,75,000$

Z's Capital = $5,25,000 \times \frac{1}{2} = \text{Rs. } 1,75,000$

Page No 164:

Question 5: Explain how will you deal with goodwill when new partner is not in a position to bring his share of goodwill in cash.?

ANSWER:

When the new partner is not in a position to bring his share of goodwill in cash, then goodwill account is adjusted through the old Partners' Capital Account. New Partner's Capital Account or Current Account is debited with his/her share of goodwill and the partners who sacrifice their share in favour of the new partner are credited in their sacrificing ratio. The following Journal entry is passed in the books of accounts.

New Partner's Capital A/c	Dr.
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To Old Partners' Capital A/c	
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(New partner capital account is debited with his/her share of goodwill and sacrificing Partners' Capital Account are credited in their sacrificing ratio)

NOTE: As per the *Para 16 of Accounting Standard 10*, goodwill is recorded in the books only when some consideration in money or money's worth has been paid for it. This practice is mandatory to follow. In the case of admission, retirement, death or change in profit sharing ratio among existing partners, Goodwill Account cannot be raised as no consideration is paid for it.

Page No 164:

Question 6: Explain various methods for the treatment of goodwill on the admission of a new partner?

ANSWER:

The methods for the treatment of goodwill on the admission of a new partner are given below.

2. Revaluation Method

Old Partners' Capital A/c Dr.
To Goodwill A/c

1. Premium Method- This method is used when a new partner pays his/her share of goodwill in cash. The following are the different situations under this method.

In this case, there is no need to pass any Journal entry in the books of accounts as the goodwill is privately paid.

Accounting Entries

Cash/Bank A/c Dr.
To Premium for Goodwill A/c

(Amount of goodwill brought in by the new partner)

b) For transferring of new partner's goodwill among the old partners, i.e. if goodwill is retained in the business.

Premium for Goodwill A/c Dr

To Sacrificing Partners' Capital A/c

(Goodwill brought in by the new partner is distributed among the old partners in their sacrificing ratio)

c) If the new partner's share of goodwill is withdrawn by the old partner, then

Sacrificing Partner's Capital, A/c Dr.

To Cash A/c

(Amount of goodwill withdrawn by the old partners)

iii) If the new partner partly brings his/her share of goodwill

a) For bringing goodwill in cash

Cash A/c Dr.

To Premium for Goodwill A/c

(Amount of goodwill brought in cash by the new partner)

b) For transferring of goodwill to the old partners

Goodwill A/c	Dr.	(With the amount of goodwill brought in by the new partner)
New Partner's Capital A/c	Dr.	(With the amount of goodwill not brought in by the new partner)
To Sacrificing Partners' Capital A/c		

(Goodwill amount of the new partner distributed among the old partners in their sacrificing ratio)

2. Revaluation Method- When the new partner is *not* able to bring goodwill in cash at all.

New Partner's Capital A/c	Dr.	(With the whole amount of goodwill that is not brought in by the new partner)
To Old Partners' Capital A/c		

(Goodwill amount of the new partner distributed among the old partners in their sacrificing ratio)

NOTE: As per the *Para 16 of Accounting Standard 10*, goodwill is recorded in the books only when some consideration in money or money's worth has been paid for it. This practice is mandatory to follow. In case of admission, retirement, death or change in profit sharing ratio among existing partners, Goodwill Account cannot be raised as no consideration is paid for it.

Page No 164:

Question 7: How will you deal with the accumulated profit and losses and reserves on the admission of a new partner?

ANSWER:

When a new partner is admitted in a partnership firm, then all past accumulated profits or losses and reserves are distributed among all the old partners in their old profit sharing ratio. This is because these profits and losses are attributable to the hard work and labours of the old partners and consequently, the old partners are liable to bear past losses or profits, if any. The new partner is not entitled for a share in these profits as he/she did not contribute anything for the past performance of the business.

Accounting Treatment of Accumulated Profits and Losses

i) For distributing accumulated profits and reserves

Profit and Loss A/c	Dr.
General Reserve A/c	Dr.
Reserve Fund A/c	Dr.
Workmen's Compensation Fund A/c	Dr.
Contingency Reserve A/c	Dr.
To Old Partners' Capital A/c	

(Undistributed profits and reserves are distributed among old partners in their old profit sharing ratio)

ii) For distributing accumulated losses

Old Partners' Capital A/c	Dr.
To Profit and Loss (Debit balance) A/c	
To Deferred Advertisement Expenses A/c	
To Preliminary Expenses A/c	

(Undistributed losses are distributed among old partners in their old profit sharing ratio)

Page No 164:

Question 8: At what figures the value of assets and liabilities appear in the books of the firm after revaluation has been done? Show with the help of an imaginary balance sheet.

ANSWER:

After revaluation has been done, the assets and liabilities appear at their current market values in the Balance Sheet of the reconstituted firm. This can be better explained with the help of the below explained example.

A and B shares profit and loss equally.

Balance Sheet of A and B as on April 01, 2011

Liabilities	Amount Rs	Assets	Amount Rs
Sundry Creditors	1,00,000	Cash in Hand	8,000
Capital Accounts		Cash at Bank	28,000
A 75,000		Debtors	40,000
B 75,000	1,50,000	Stock	36,000
		Furniture	38,000
		Plant and Machinery	1,00,000
	<u>2,50,000</u>		<u>2,50,000</u>

- 1) On that date C is admitted for 1/3rd share and brings 1,00,000 as capital.
- 2) The value of stock is increased by Rs 7,000.
- 3) A provision of Rs 2,000 has been created against Debtors.

4) Furniture revalued at Rs 35,000.

5) A machinery costing Rs 50,000 purchased is not recorded in books.

6) Rent outstanding Rs 2,000.

Prepare Revaluation Account, Partners' Capital Account, Cash Account and Balance Sheet.

Sol:

Revaluation Account

Dr.		Cr.	
Particular	Amount Rs	Particular	Amount Rs
Rent Outstanding A/c	2,000	Stock	7,000
Provision for Debtors	2,000	Machinery	50,000
Furniture	35,000		
Profit transferred:			
A's Capital A/c 25,000			
B's Capital A/c 25,000	50,000		
	57,000		57,000

A's Capital Account

Dr.				Cr.			
Date	Particular	J.F.	Amount Rs	Date	Particular	J.F.	Amount Rs
	Balance c/d		1,00,000		Balance b/d		75,000
					Revaluation A/c		25,000
			1,00,000				1,00,000

B's Capital Account

Dr.

Cr.

Date	Particular	J.F.	Amount Rs	Date	Particular	J.F.	Amount Rs
	Balance c/d		1,00,000		Balance b/d		75,000
			1,00,000		Revaluation A/c		25,000
							1,00,000

C's Capital Account

Dr.

Cr.

Date	Particular	J.F.	Amount Rs	Date	Particular	J.F.	Amount Rs
	Balance c/d		1,00,000		Cash A/c		1,00,000
			1,00,000				1,00,000

Cash Account

Dr.

Cr.

Date	Particular	J.F.	Amount Rs	Date	Particular	J.F.	Amount Rs
	Balance b/d		8,000		Balance c/d		1,08,000
	C's Capital A/c		1,00,000				
			1,08,000				1,08,000

Balance Sheet of A, B & C as at April

Liabilities	Amount Rs	Assets	Amount Rs
Sundry Creditors	1,00,000	Cash in hand	1,08,000
Rent Outstanding	2,000	Cash at Bank	28,000
		Debtors	40,000
		<i>Less: Provision</i>	<u>2,000</u>
Capital Account			38,000
A	1,00,000	Stock	43,000
B	1,00,000	Furniture	35,000
C	<u>1,00,000</u>	Plant and Machinery	1,50,000
	3,00,000		
	<u>4,02,000</u>		<u>4,02,000</u>

Page No 164:

Question 1: A and B were partners in a firm sharing profits and losses in the ratio of 3:2. They admit C into the partnership with $\frac{1}{6}$ share in the profits. Calculate the new profit sharing ratio?

ANSWER:

A : B

Old Ratio 3 : 2

OR

$\frac{3}{5}$: $\frac{2}{5}$

C admits for $\frac{1}{6}$ share of new profit in new firm.

Let new firm profit = 1

Remaining share of A and B in the new firm = 1 – C's share

$$= 1 - \frac{1}{6}$$

$$= \frac{5}{6}$$

New Ratio = Old Ratio $\times$ Remaining Share of A and B

$$A = \frac{3}{5} \times \frac{5}{6}$$

$$= \frac{15}{30}$$

$$B = \frac{2}{5} \times \frac{5}{6}$$

$$= \frac{10}{30}$$

A : B : C

$$\text{New Ratio} = \frac{15}{30} : \frac{10}{30} : \frac{1}{6}$$

$$= \frac{15:10:5}{30}$$

$$= 15 : 10 : 5$$

$$= 3 : 2 : 1$$

Page No 164:

Question 2: A, B, C were partners in a firm sharing profits in 3:2:1 ratio. They admitted D for 10% profits. Calculate the new profit sharing ratio?

ANSWER:

A : B : C

Old Ratio = 3 : 2 : 1

$$= \frac{3}{6} : \frac{2}{6} : \frac{1}{6}$$

D admits for $\frac{10}{100}$ share in the new firm

Let new firm profit = 1

Remaining share of A, B and C in new firm = $1 - D's \text{ share}$

$$= 1 - \frac{10}{100}$$

$$= \frac{90}{100}$$

$$= \frac{9}{10}$$

New Ratio = Old Ratio $\times$ Remaining Share of A, B and C in new firm

$$A = \frac{3}{6} \times \frac{9}{10}$$

$$= \frac{27}{60}$$

$$B = \frac{2}{6} \times \frac{9}{10}$$

$$= \frac{18}{60}$$

$$C = \frac{1}{6} \times \frac{9}{10}$$

$$= \frac{9}{60}$$

A : B : C

$$\begin{aligned} \text{New Ratio} &= \frac{27}{60} : \frac{18}{60} : \frac{9}{60} : \frac{1}{10} = \frac{27:18:9:6}{60} \\ &= 9 : 6 : 3 : 2 \end{aligned}$$

Page No 164:

Question 3: X and Y are partners sharing profits in 5:3 ratio admitted Z for $\frac{1}{10}$ share which he acquired equally for X and Y. Calculate new profit sharing ratio?

ANSWER:

$$A : B$$

$$\text{Old Ratio} = 5 : 3$$

$$= \frac{5}{8} : \frac{3}{8}$$

Z admits for $\frac{1}{10}$ share in the new firm.

$$\text{X and Y each sacrifice} = \frac{1}{10} \times \frac{1}{2} = \frac{1}{20}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$X's = \frac{5}{8} - \frac{1}{20}$$

$$= \frac{25-2}{40} = \frac{23}{40}$$

$$Y's = \frac{3}{8} - \frac{1}{20}$$

$$= \frac{15-2}{40} = \frac{13}{40}$$

$$A : B : C$$

$$\text{New Ratio} = \frac{23}{40} : \frac{13}{40} : \frac{1}{10}$$

$$= \frac{23:13:4}{40}$$

$$= 23 : 13 : 4$$

Page No 165:

Question 4: A, B and C are partners sharing profits in 2:2:1 ratio admitted D for $\frac{1}{8}$ share which he acquired entirely from A. Calculate new profit sharing ratio?

ANSWER:

$$A : B : C$$

$$\text{Old Ratio} = 2 : 2 : 1$$

$$= \frac{2}{5} : \frac{2}{5} : \frac{1}{5}$$

D admits for $\frac{1}{8}$ share in new firm, which he takes from A.

Here only A will sacrifice.

New Ratio = Old Ratio – Sacrificing Ratio

$$A = \frac{2}{5} - \frac{1}{8}$$

$$= \frac{16-5}{40}$$

$$= \frac{11}{40}$$

$$A : B : C : D$$

$$\text{New Ratio} = \frac{11}{40} : \frac{2}{5} : \frac{1}{5} : \frac{1}{8}$$

$$= \frac{11:16:8:5}{40}$$

$$= 11 : 16 : 8 : 5$$

Page No 165:

Question 5: P and Q are partners sharing profits in 2:1 ratio. They admitted R into partnership giving him $\frac{1}{5}$ share which he acquired from P and Q in 1: 2 ratios. Calculate new profit sharing ratio?

ANSWER:

$$P : Q$$

$$\text{Old Ratio} = 2 : 1$$

$$= \frac{2}{3} : \frac{1}{3}$$

R admits for $\frac{1}{5}$ share in the new firm which he takes from $\frac{1}{3}$ from P and $\frac{2}{3}$ from Q.

$$\text{P's sacrifice} = \text{R's share} \times \frac{1}{3}$$

$$= \frac{1}{5} \times \frac{1}{3} = \frac{1}{15}$$

$$\text{Q's sacrifice} = \text{R's share} \times \frac{2}{3}$$

$$= \frac{1}{5} \times \frac{2}{3} = \frac{2}{15}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$\begin{aligned} \text{P} &= \frac{2}{3} - \frac{1}{15} \\ &= \frac{10-1}{15} = \frac{9}{15} \end{aligned}$$

$$\begin{aligned} \text{Q} &= \frac{1}{3} - \frac{2}{15} \\ &= \frac{5-2}{15} = \frac{3}{15} \end{aligned}$$

P : Q : R

$$\begin{aligned} \text{New Ratio} &= \frac{9}{15} : \frac{3}{15} : \frac{1}{5} \\ &= \frac{9:3:3}{15} \\ &= 3 : 1 : 1 \end{aligned}$$

Page No 165:

Question 6: A, B and C are partners sharing profits in 3:2:2 ratios. They admitted D as a new partner for $\frac{1}{5}$ share which he acquired from A, B and C in 2:2:1 ratio respectively. Calculate new profit sharing ratio?

ANSWER:

$$A : B : C$$

$$\text{Old Ratio} = 3 : 2 : 2$$

$$= \frac{3}{7} : \frac{2}{7} : \frac{2}{7}$$

D admits for $\frac{1}{5}$ share in the new firm which he takes $\frac{1}{5}$ in the ratio 2:2:1 from A, B and C.

$$A's \text{ sacrifice} = D's \text{ share} \times \frac{2}{5}$$

$$= \frac{1}{5} \times \frac{2}{5} = \frac{2}{25}$$

$$B's \text{ sacrifice} = D's \text{ share} \times \frac{2}{5}$$

$$= \frac{1}{5} \times \frac{2}{5} = \frac{2}{25}$$

$$C's \text{ sacrifice} = D's \text{ share} \times \frac{1}{5}$$

$$= \frac{1}{5} - \frac{1}{5} = \frac{1}{25}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$A = \frac{3}{7} - \frac{2}{25}$$

$$= \frac{75-14}{175} = \frac{61}{175}$$

$$B = \frac{2}{7} - \frac{1}{25}$$

$$= \frac{50-14}{175} = \frac{61}{175}$$

$$C = \frac{2}{7} - \frac{1}{25}$$

$$= \frac{50-7}{175} = \frac{41}{175}$$

$$A : B : C : D$$

$$\text{New Ratio} = \frac{61}{175} : \frac{36}{175} : \frac{43}{175} : \frac{1}{5}$$

$$= \frac{61:36:43:35}{175}$$

$$= 61 : 36 : 43 : 35$$

Page No 165:

Question 7: A and B were partners in a firm sharing profits in 3:2 ratio. They admitted C for $\frac{3}{7}$ share which he took $\frac{2}{7}$ from A and $\frac{1}{7}$ from B. Calculate new profit sharing ratio?

ANSWER:

$$A : B$$

$$\text{Old Ratio} = 3 : 2$$

$$= \frac{3}{5} : \frac{2}{5}$$

C admitted for $\frac{3}{7}$ share in the new firm

$$A's \text{ sacrifice} = \frac{2}{7}$$

$$\text{B's sacrifice} = \frac{1}{7}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$\begin{aligned} A &= \frac{3}{5} - \frac{2}{7} = \frac{21-10}{35} \\ &= \frac{11}{35} \end{aligned}$$

$$\begin{aligned} B &= \frac{2}{7} - \frac{1}{7} = \frac{14-5}{35} \\ &= \frac{9}{35} \end{aligned}$$

A : B : C

$$\begin{aligned} \text{New Ratio} &= \frac{11}{35} : \frac{9}{35} : \frac{3}{7} \\ &= \frac{11:9:15}{35} \\ &= 11:9:15 \end{aligned}$$

Page No 165:

Question 8: A, B and C were partners in a firm sharing profits in 3:3:2 ratios. They admitted D as a new partner for $\frac{4}{7}$ profit. D acquired his share $\frac{2}{7}$ from A. $\frac{1}{7}$ from B and $\frac{1}{7}$ from C. Calculate new profit sharing ratio?

ANSWER:

A : B : C

Old Ratio = 3 : 3 : 2

$$= \frac{3}{8} : \frac{2}{8} : \frac{2}{8}$$

D admitted for $\frac{4}{7}$ share of profit in new firm.

D's share = A's sacrifice + B's Sacrifice + C's sacrifice

$$\frac{4}{7} = \frac{2}{7} + \frac{1}{7} + \frac{1}{7}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$\begin{aligned} A &= \frac{3}{8} - \frac{2}{7} \\ &= \frac{21-16}{56} = \frac{5}{56} \end{aligned}$$

$$\begin{aligned} B &= \frac{3}{8} - \frac{1}{7} \\ &= \frac{21-8}{56} = \frac{13}{56} \end{aligned}$$

$$\begin{aligned} C &= \frac{2}{8} - \frac{1}{7} \\ &= \frac{14-8}{56} = \frac{6}{56} \end{aligned}$$

A : B : C : D

$$\begin{aligned} \text{New Ratio} &= \frac{5}{56} : \frac{13}{56} : \frac{6}{56} : \frac{4}{7} \\ &= \frac{5:13:6:32}{56} \\ &= 5 : 13 : 6 : 32 \end{aligned}$$

Page No 165:

Question 9: Radha and Rukmani are partners in a firm sharing profits in 3:2 ratios. They admitted Gopi as a new partner. Radha surrendered 1/3 of her share in favour of Gopi and Rukmani surrendered 1/4 of her share in favour of Gopi. Calculate new profit sharing ratio?

ANSWER:

Radha : Rukmani

$$\begin{aligned}\text{Old Ratio} &= 3 : 2 \\ &= \frac{3}{5} : \frac{2}{5}\end{aligned}$$

Radha surrendered in favour of Gopi = $\frac{1}{3}$ of his share

Rukmani surrendered in favour of Gopi = $\frac{1}{4}$ of his share

Sacrificing Ratio = Old Ratio $\times$ Surrender Ratio

$$\text{Radha} = \frac{3}{5} \times \frac{1}{3} = \frac{1}{5}$$

$$\text{Rukmani} = \frac{2}{5} \times \frac{1}{4} = \frac{1}{10}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$\text{Radha} = \frac{3}{5} - \frac{1}{5} = \frac{2}{5}$$

$$\text{Rukmani} = \frac{2}{5} - \frac{1}{10} = \frac{4-1}{10} = \frac{3}{10}$$

Gopi's Share = Radha's Sacrificing Ratio + Rukmani's Sacrificing Ratio

$$= \frac{1}{5} + \frac{1}{10} = \frac{2+1}{10}$$

$$= \frac{3}{10}$$

Radha : Rukmani : Gopi

$$\text{New ratio} = \frac{2}{5} : \frac{3}{10} : \frac{3}{10}$$

$$= \frac{4:3:3}{10}$$

$$= 4 : 3 : 3$$

Page No 165:

Question 10: Singh, Gupta and Khan are partners in a firm sharing profits in 3:2:3 ratio. They admitted Jain as a new partner. Singh surrendered $\frac{1}{3}$ of his share in favour of Jain: Gupta surrendered $\frac{1}{4}$ of his share in favour of Jain and Khan surrendered $\frac{1}{5}$ in favour of Jain. Calculate new profit sharing ratio?

ANSWER:

Singh : Gupta : Khan

$$\text{Old ratio} = 3 : 2 : 3$$

$$= 3 : 2 : 3$$

$$\text{Singh Surrender} = \frac{1}{3} \text{ of his share}$$

$$\text{Gupta Surrender} = \frac{1}{4} \text{ of his share}$$

$$\text{Khan Surrender} = \frac{1}{5} \text{ of his share}$$

Sacrificing Ratio = Old Ratio $\times$ Surrender Ratio

$$\text{Singh's} = \frac{3}{8} \times \frac{1}{3} = \frac{3}{24}$$

$$\text{Gupta's} = \frac{2}{8} \times \frac{1}{4} = \frac{2}{32}$$

$$\text{Khan's} = \frac{3}{8} \times \frac{1}{5} = \frac{3}{40}$$

New Ratio = Old Ratio – Sacrificing Ratio

$$\text{Singh's} = \frac{3}{8} - \frac{3}{24} = \frac{9-3}{24} = \frac{6}{24}$$

$$\text{Gupta's} = \frac{2}{8} - \frac{2}{32} = \frac{8-2}{32} = \frac{6}{32}$$

$$\text{Khan's} = \frac{3}{8} - \frac{3}{40} = \frac{15-3}{40} = \frac{12}{40}$$

$$\begin{aligned}
 \text{Jain's Share} &= \frac{\text{Singh's Sacrifice}}{\frac{3}{24}} + \frac{\text{Gupta's Sacrifice}}{\frac{2}{32}} + \frac{\text{Khan's Sacrifice}}{\frac{3}{40}} \\
 &= \frac{60+30+36}{480} \\
 &= \frac{21}{80}
 \end{aligned}$$

$$\begin{aligned}
 &\text{Singh : Gupta : Khan : Jain} \\
 \text{New Ratio} &= \frac{6}{24} : \frac{6}{32} : \frac{12}{40} : \frac{21}{80} \\
 &= \frac{120:90:144:126}{480} \\
 &= 20 : 15 : 24 : 21
 \end{aligned}$$

Page No 165:

Question 11: Sandeep and Navdeep are partners in a firm sharing profits in 5: 3 ratio. They admit C into the firm and the new profit sharing ratio was agreed at 4:2:1. Calculate the sacrificing ratio?

ANSWER:

$$\begin{aligned}
 &\text{Sandeep : Navdeep} \\
 \text{Old Ratio} &= 5 : 3 \\
 &= \frac{5}{8} : \frac{3}{8} \\
 &\text{Sandeep : Navdeep : C} \\
 \text{Old Ratio} &= 4 : 2 : 1 \\
 &= \frac{4}{7} : \frac{2}{7} : \frac{1}{7}
 \end{aligned}$$

Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Sandeep} = \frac{5}{8} - \frac{4}{7} = \frac{35-32}{56} = \frac{3}{56}$$

$$\text{Navdeep} = \frac{3}{8} - \frac{2}{7} = \frac{21-16}{56} = \frac{5}{56}$$

Sandeep : Navdeep

$$\begin{aligned} \text{Sacrificing Ratio} &= \frac{3}{56} : \frac{5}{56} \\ &= 3 : 5 \end{aligned}$$

Note: As solution sacrificing ratio is 3 : 5. However, answer given the book is different.

Page No 165:

Question 12: Rao and Swami are partners in a firm sharing profits and losses in 3:2 ratio. They admit Ravi as a new partner for $\frac{1}{8}$ share in the profits. The new profit sharing ratio between Rao and Swami is 4:3. Calculate new profit sharing ratio and sacrificing ratio?

ANSWER:

Rao : Swami

Old Ratio = 3 : 2

Ravi admits for $\frac{1}{8}$ share of profit in the new firm.

Let the New Firm Profit = 1

Combined share of Rao and Swami in the new firm

= 1 – Ravi's share of profit

$$= 1 - \frac{1}{8}$$

$$= \frac{7}{8}$$

New Ratio = Combined Share of Rao and Swami $\times$ Proportion of Rao and Swami in the combined share

$$\text{Rao} = \frac{7}{8} \times \frac{4}{7} = \frac{28}{56}$$

$$\text{Swami} = \frac{7}{8} \times \frac{3}{7} = \frac{21}{56}$$

Rao : Swami : C

$$\begin{aligned} \text{New Ratio} &= \frac{28}{56} : \frac{21}{56} : \frac{1}{8} \\ &= \frac{28:21:7}{56} \\ &= 4 : 3 : 1 \end{aligned}$$

Sacrificing Ratio = Old Ratio – New Ratio

$$\begin{aligned} \text{Rao} &= \frac{3}{5} - \frac{4}{8} = \frac{24-20}{40} \\ &= \frac{4}{40} \end{aligned}$$

$$\begin{aligned} \text{Swami} &= \frac{2}{5} - \frac{3}{8} = \frac{16-15}{40} \\ &= \frac{1}{40} \end{aligned}$$

Sacrificing Ratio = Rao : Swami

$$\begin{aligned} &= \frac{4}{40} : \frac{1}{40} \\ &= 4 : 1 \end{aligned}$$

Page No 165:

Question 13: Compute the value of goodwill on the basis of four years' purchase of the average profits based on the last five years? The profits for the last five years were as follows:

	Rs
2013	40,000
2014	50,000
2015	60,000
2016	50,000
2017	60,000

ANSWER:

$$\text{Average Profit} = \frac{\text{Sum of given year's profit}}{\text{number of given years}}$$

Year	Profit
2013	40,000
2014	50,000
2015	60,000
2016	50,000
2017	60,000
Sum of 5 years profit	2,60,000

$$\text{Average Profit} = \frac{2,60,000}{5} = 52,000$$

$$\text{Goodwill} = \text{Average Profit} \times \text{Number of Year's Purchases} = 52,000 \times 4 = \text{Rs. 2,08,000.}$$

Page No 166:

Question 14: Capital employed in a business is Rs. 2,00,000. The normal rate of return on capital employed is 15%. During the year 2015 the firm

earned a profit of Rs. 48,000. Calculate goodwill on the basis of 3 years purchase of super profit?

ANSWER:

Capital Employed = Rs 2,00,000

Actual Profit = 48,000

Normal Rate of Return = 15%

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

= 2,00,000 $\times \frac{5}{100}$

= Rs 30,000

Super profit = Actual Profit – Normal Profit

= 48,000 – 30,000

= Rs 18,000

Goodwill = Super Profit $\times$ Number of Years Purchase

= 18,000 $\times$ 3

= Rs 54,000

Page No 166:

Question 15: The books of Ram and Bharat showed that the capital employed on 31.12.2016 was Rs. 5,00,000 and the profits for the last 5 years: 2015 Rs. 40,000; 2014 Rs. 50,000; 2013 Rs. 55,000; 2012 Rs. 70,000 and 2011 Rs. 85,000. Calculate the value of goodwill on the basis of 3 years purchase of the average super profits of the last 5 years assuming that the normal rate of return is 10%?

ANSWER:

$$\text{Average Actual Profit} = \frac{\text{Sum of given year profit}}{\text{number of given years}}$$

Year	Profit
2015	40,000
2014	50,000
2013	55,000
2012	70,000
2011	85,000
Sum of 5 years profit	3,00,000

$$\text{Average Actual Profit} = \frac{3,00,000}{5} = \text{Rs } 60,000$$

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

$$= 5,00,000 \times \frac{10}{100}$$

$$= \text{Rs } 50,000$$

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

$$= 60,000 - 50,000$$

$$= \text{Rs } 10,000$$

$$\text{Goodwill} = \text{Average Super Profit} \times \text{Number of year purchase}$$

$$= 10,000 \times 3$$

$$= \text{Rs } 30,000$$

Page No 166:

Question 16: Rajan and Rajani are partners in a firm. Their capitals were Rajan Rs. 3,00,000; Rajani Rs. 2,00,000. During the year 2015 the firm earned a profit of Rs. 1,50,000. Calculate the value of goodwill of the firm assuming that the normal rate of return is 20%?

ANSWER:

Rajan's Capital 3,00,000

Rajni's Capital 2,00,000

Total Capital Employed 5,00,000

Normal Rate of Return = 20%

Capitalised Value = Actual Profit $\times \frac{100}{\text{Normal Rate of Return}}$

$$= 1,50,000 \times \frac{100}{20}$$

= Rs 7,50,000

Goodwill = Capitalised Value – Capital Employed

$$= 7,50,000 - 5,00,000$$

= Rs 2,50,000

Alternative Method

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

$$= 5,00,000 \times \frac{100}{20}$$

= Rs 1,00,000

Super profit = Actual Profit – Normal Profit

$$= 1,50,000 - 1,00,000$$

= Rs 50,000

Goodwill = Super Profit $\times \frac{100}{\text{Normal Rate of Return}}$

$$= 50,000 \times \frac{100}{20}$$

$$= \text{Rs } 2,50,000$$

Page No 166:

Question 17: A business has earned average profits of Rs. 1,00,000 during the last few years. Find out the value of goodwill by capitalisation method, given that the assets of the business are Rs. 10,00,000 and its external liabilities are Rs. 1,80,000. The normal rate of return is 10%?

ANSWER:

Capital Employed = Assets – External Liabilities

$$= 10,00,000 - 1,80,000$$

$$= \text{Rs } 8,20,000$$

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

$$= 8,20,000 \times \frac{10}{100}$$

$$= \text{Rs } 82,000$$

Super Profit = Actual Profit – Normal Profit

$$= 1,00,000 - 82,000$$

$$= \text{Rs } 18,000$$

$$\text{Goodwill} = \text{Super Profit} \times \frac{100}{\text{Normal Rate of Return}}$$

$$= 18,000 \times \frac{100}{10}$$

$$= \text{Rs } 1,80,000$$

Alternative Method

$$\text{Capitalised Value} = \text{Actual Profit} \times \frac{100}{\text{Normal Rate of Return}}$$

$$\text{Capitalised value} = 1,00,000 \times \frac{100}{10}$$

$$= \text{Rs } 1,00,000$$

$$\text{Goodwill} = \text{Capitalised Value} - \text{Capital Employed}$$

$$= 10,00,000 - 8,20,000$$

$$= \text{Rs } 1,80,000$$

Page No 166:

Question 18: Verma and Sharma are partners in a firm sharing profits and losses in the ratio of 5: 3. They admitted Ghosh as a new partner for 1/5 share of profits. Ghosh is to bring in Rs. 20,000 as capital and Rs. 4,000 as his share of goodwill premium. Give the necessary journal entries:

- a) When the amount of goodwill is retained in the business.
- b) When the amount of goodwill is fully withdrawn.
- c) When 50% of the amount of goodwill is withdrawn.
- d) When goodwill is paid privately.

ANSWER:

Journal Entries

S. No.	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
Case (a)	Cash A/c Dr. To Ghosh's Capital A/c To Premium for Goodwill A/c (Capital and Goodwill his share brought by Ghosh)		24,000	20,000 4,000
	Premium for Goodwill A/c Dr. To Verma's Capital A/c To Sharma's Capital A/c (Goodwill brought by Ghosh credited to Old Partners in Sacrificing ratio)		4,000	2,500 1,500
Case (b)	Cash A/c Dr. To Ghosh Capital A/c To Premium for Goodwill A/c (Capital and Goodwill brought by Ghosh for (1/5) share of profit)		24,000	20,000 4,000
	Premium for Goodwill A/c Dr. To Verma's Capital A/c To Sharma's Capital A/c (Goodwill brought by Ghosh credited in Old Partner in Sacrificing Ratio)		4,000	2,500 1,500
	Verma's Capital A/c Dr. Sharma's Capital A/c Dr. To Cash A/c (Amount of Premium for Goodwill withdrawn by Old Partners)		2,500 1,500	4,000
Case (c)	Cash A/c Dr.		24,000	

Case (d)	To Ghosh's Capital A/c To Premium for Goodwill A/c (Capital and Goodwill brought by Ghosh for (1/5) share of profit)			20,000 4,000
	Premium for Goodwill A/c To Verma's Capital A/c To Sharma's Capital A/c (Premium for Goodwill credited to Old Partner's Capital Account in sacrificing ratio)	Dr.	4,000	2,500 1,500
	Verma's Capital A/c Sharma's Capital A/c To Cash A/c (Half of the amount of premium for goodwill withdrawn by Old partners)	Dr.	1,250 750	2,000
	No entry: Goodwill was not brought in to firm			

Page No 166:

Question 19: A and B are partners in a firm sharing profits and losses in the ratio of 3:2. They decide to admit C into partnership with 1/4 share in profits. C will bring in Rs. 30,000 for capital and the requisite amount of goodwill premium in cash. The goodwill of the firm is valued at Rs, 20,000. The new profit sharing ratio is 2:1:1. A and B withdraw their share of goodwill. Give necessary journal entries?

ANSWER:

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Cash A/c Dr. To C's Capital A/c To Premium for Goodwill A/c (Amount of Capital and Share of Goodwill brought by C)		35,000	30,000 5,000
	Premium for Goodwill A/c Dr. To A's Capital A/c To B's Capital A/c (C's Share of Goodwill credited to A and B in 2:3, Sacrificing Ratio)		5,000	2,000 3,000
	A's Capital A/c Dr. B's Capital A/c Dr. To Cash A/c (Share of Goodwill withdrawn by Old Partners)		2,000 3,000	5,000

Sacrificing Ratio = Old Ratio – New Ratio

$$\begin{aligned}
 A &= \frac{3}{5} - \frac{2}{4} \\
 &= \frac{12-10}{20} = \frac{2}{20}
 \end{aligned}$$

$$\begin{aligned}
 B &= \frac{2}{5} - \frac{1}{4} \\
 &= \frac{8-5}{20} = \frac{3}{20}
 \end{aligned}$$

$$\begin{array}{ccc} & \text{A} & \text{B} \\ \text{Sacrificing Ratio} = & \frac{2}{20} & : \quad \frac{3}{20} \\ & 2 & : \quad 3 \end{array}$$

Goodwill of the firm = Rs 20,000

C's share of Goodwill = $20,000 \times \frac{1}{4} = \text{Rs. } 5,000$

A will receive = $5,000 \times \frac{2}{5} = 2,000$

Or $20,000 \times \frac{2}{20} = 2,000$

B will receive = $5,000 \times \frac{3}{5} = 3,000$

Or $20,000 \times \frac{3}{20} = 3,000$

Page No 166:

Question 20: Arti and Bharti are partners in a firm sharing profits in 3:2 ratio, They admitted Sarthi for 1/4 share in the profits of the firm. Sarthi brings Rs. 50,000 for his capital and Rs. 10,000 for his 1/4 share of goodwill. Goodwill already appears in the books of Arti and Bharti at Rs. 5,000. the new profit sharing ratio between Arti, Bharti and Sarthi will be 2:1:1. Record the necessary journal entries in the books of the new firm?

ANSWER:

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Arti's Capital A/c Dr. Bharti's Capital A/c Dr. To Goodwill A/c (Goodwill written off)		3,000 2,000	5,000
	Cash A/c Dr. To Sarthi's Capital A/c To Premium for Goodwill A/c (Amount of capital and share of goodwill brought by Sarthi)		60,000	50,000 10,000
	Premium for Goodwill A/c Dr. To Arti's Capital A/c To Bharti's Capital A/c (Premium for Goodwill credited Arti's Capital Account)		10,000	4,000 6,000

Arti : Bharti

Old Ratio 3 : 2

Sarthi admitted for $\frac{1}{4}$ share in new firm.

Arti : Bharti : Sarthi

New Ratio 2 : 1 : 1

Sacrificing Ratio = Old Ratio – New Ratio

Arti will receive = $10,000 \times \frac{2}{5} = 4,000$

$$\text{Bharti will receive} = 10,000 \times \frac{3}{5} = 6,000$$

Page No 167:

Question 21: X and Y are partners in a firm sharing profits and losses in 4: 3 ratio. They admitted Z for 1/8 share. Z brought Rs. 20,000 for his capital and Rs. 7,000 for his 1/8 share of goodwill. Subsequently X, Y and Z decided to show goodwill in their books at Rs. 40,000. Show necessary journal entries in the books of X, Y and Z?

ANSWER:

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Cash A/c Dr. To Z's Capital A/c To Premium for Goodwill A/c (Amount of Capital and his share of Goodwill brought by Z)		27,000	20,000 7,000
	Premium for Goodwill A/c Dr. To X's Capital A/c To Y's Capital A/c (Premium for Goodwill credit to Old Partners in Sacrificing Ratio)		7,000	4,000 3,000
	Goodwill Rs 40,000 cannot be raised. According to AS-10 Goodwill can be shown in the book if money and money value is paid for it. Here no money or money value has been paid for Goodwill.			

Page No 167:

Question 22: Aditya and Ballan are partners sharing profits and losses in 3: 2 ratio. They admitted Christopher for 1/4 share in the profits. The new profit sharing ratio agreed was 2:1:1. Christopher brought Rs. 50,000 for his capital. His share of goodwill was agreed to at Rs. 15,000. Christopher could bring only Rs. 10,000 out of his share of goodwill. Record necessary journal entries in the books of the firm?

ANSWER:

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Cash A/c Dr.		60,000	50,000
	To Christopher's Capital A/c			10,000
	To Premium for Goodwill A/c			
	(Amount of Capital and Premium for Goodwill brought by Christopher)			
	Premium for Goodwill A/c Dr.		10,000	
	Christopher's Capital A/c Dr.		5,000	
	To Aditya's Capital A/c			6,000
	To Ballan's Capital A/c			9,000
	(Goodwill Christopher's Share taken by Old Partner's in Sacrificing Ratio)			

Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Aditya} = \frac{3}{5} - \frac{2}{4} = \frac{12-10}{20} = \frac{2}{20}$$

$$\text{Ballan} = \frac{2}{5} - \frac{1}{4} = \frac{8-5}{20} = \frac{3}{20}$$

$$\text{Sacrificing Ratio} = \frac{2}{10} : \frac{3}{20} = \frac{2:3}{20}$$

$$= 2 : 3$$

Page No 167:

Question 23: Amar and Samar were partners in a firm sharing profits and losses in 3:1 ratio. They admitted Kanwar for 1/4 share of profits. Kanwar could not bring his share of goodwill premium in cash. The Goodwill of the firm was valued at Rs. 80,000 on Kanwar's admission. Record necessary journal entry for goodwill on Kanwar's admission.

ANSWER:

Amar : Samar

Old Ratio 3 : 1

Kanwar admitted for 1/4 share of profit.

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Kanwar's Capital A/c To Amar's Capital A/c To Samar's Capital A/c (Kanwar's share of goodwill charged from his capital account by Amar and Kanwar in sacrificing ratio) Dr.		20,000	15,000 5,000

New Firm's Goodwill = Rs 80,000

Kanwar's Share of Goodwill = $80,000 \times \left(\frac{1}{4}\right) = 20,000$

Kanwar's Goodwill will be taken by Amar and Samar in their sacrificing ratio here. Sacrificing Ratio will be equal to old ratio because new and sacrificing ratio is not given,

if sacrificing and new ratio is not given it is assumed that old partners sacrificed in their old ratio.

Page No 167:

Question 24: Mohan Lal and Sohan Lal were partners in a firm sharing profits and losses in 3: 2 ratio. They admitted Ram Lal for 1/4 share on 1.1.2013. It was agreed that goodwill of the firm will be valued at 3 years purchase of the average profits of last 4 years which were Rs. 50,000 for 2013, Rs. 60,000 for 2014, Rs. 90,000 for 2015 and Rs. 70,000 for 2016. Ram Lal did not bring his share of goodwill premium in cash. Record the necessary journal entries in the books of the firm on Ram Lal's admission when:

- a) Goodwill already appears in the books at Rs. 2,02,500.
- b) Goodwill appears in the books at Rs. 2,500.
- c) Goodwill appears in the books at Rs. 2,05,000.

ANSWER:

Year	Profit
2013	50,000
2014	60,000
2015	90,000
2016	70,000
Sum of 4 years profit	2,70,000

$$\text{Average Profit} = \frac{2,70,000}{4} = \text{Rs } 67,500$$

$$\text{Goodwill} = \text{Average Profit} \times \text{No. of Years Purchases} = 67,500 \times 3 = 2,02,500$$

Ram Lal entered into the firm for $\frac{1}{4}$ share of Profit.

Ram Lal's share of goodwill = $2,02,500 \times \left(\frac{1}{4}\right) = \text{Rs } 50,625$

Here sacrificing ratio of Mohan Lal and Sohan Lal will be equal to old ratio because new and sacrificing ratio is not given.

Mohan Lal will get = Ram Lal's Share of Goodwill $\times \left(\frac{3}{5}\right) = 50,625 \times \left(\frac{3}{5}\right) = 10,125 \times 3 = \text{Rs } 30,375$

Sohan Lal will = Ramlal Share of Goodwill $\times \left(\frac{1}{5}\right) = 50,625 \times \left(\frac{1}{5}\right) = \text{Rs } 10,125 \times 2 = \text{Rs } 20,250$

Case (a)

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Mohan Lal's Capital A/c Dr.		1,21,500	
	Sohan Lal's Capital A/c Dr.		81,000	
	To Goodwill A/c			2,02,500
	(Goodwill appeared in the old firm written off)			
	Ramlal's Capital A/c Dr.		50,625	
	To Mohan Lal's Capital A/c			30,375
	To Sohan Lal's Capital A/c			20,250
	(Ram Lal's Shares of Goodwill charged from his account and Distributed between in Mohan Lal and Sohan Lal in Sacrificing Ratio)			

Case (b)

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Mohan Lal's Capital A/c Dr. Sohan Lal's Capital A/c Dr. To Goodwill A/c (Goodwill already appeared in the books of firm written off in old ratio)		1,500 1,000	2,500
	Ramlal's Capital A/c Dr. To Mohan Lal's Capital A/c To Sohan Lal's Capital A/c (Ram Lal's Shares of Goodwill charged from his capital by Mohan Lal and Sohan Lal in sacrificing ratio)		50,625	30,375 20,250

Case (c)

Journal Entries

Date	Particulars	L.F.	Debit Amount Rs	Credit Amount Rs
	Mohan Lal's Capital A/c Dr. Sohan Lal's Capital A/c Dr. To Ram Lal's Capital A/c (Goodwill already appeared in the books of firm written off in Old Ratio)		1,23,000 82,000	2,05,000
	Ramlal's Capital A/c Dr. To Mohan Lal's Capital A/c To Sohan Lal's Capital A/c (Ram Lal's Shares of Goodwill charged from his capital by Mohan Lal and Sohan Lal in sacrificing ratio)		50,625	30,375 20,250

Page No 167:

Question 25: Rajesh and Mukesh are equal partners in a firm. They admit Hari into partnership and the new profit sharing ratio between Rajesh, Mukesh and Hari is 4:3:2. On Hari's admission goodwill of the firm is valued at Rs 36,000. Hari is unable to bring his share of goodwill premium in cash. Rajesh, Mukesh and Hari decided not to show goodwill in their balance sheet. Record necessary journal entries for the treatment of goodwill on Hari's admission.

ANSWER:

Books of Rajesh, Mukesh and Hari

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
	Hari's Capital A/c Dr.		8,000	
	To Rajesh's Capital A/c			2,000
	To Mukesh's Capital A/c			6,000
	(Adjustment of Hari's share of goodwill)			

Working Notes:

1) Goodwill of a firm = 36,000

Hari's share in goodwill

= Goodwill of firm × admitting Partner Share

$$36,000 \times \frac{2}{9} = 8,000$$

2) Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Rajesh's} = \frac{1}{2} - \frac{4}{9} = \frac{9-8}{18} = \frac{1}{18}$$

$$\text{Mukesh's} = \frac{1}{2} - \frac{3}{9} = \frac{9-6}{18} = \frac{3}{18}$$

Sacrificing Ratio between Rajesh and Mukesh 1:3.

Page No 167:

Question 26: Amar and Akbar are equal partners in a firm. They admitted Anthony as a new partner and the new profit sharing ratio is 4:3:2. Anthony could not bring this share of goodwill Rs 45,000 in cash. It is decided to do adjustment for goodwill without opening goodwill account. Pass the necessary journal entry for the treatment of goodwill?

ANSWER:

Books of Amar, Akbar and Anthony

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
	Anthony's Capital A/c Dr.		45,000	
	To Amar's Capital A/c			11,250
	To Akbar's Capital A/c			33,750
	(Adjustment of Anthony's share of goodwill between Amar and Akbar in sacrificing ratio)			

Working Notes:

1) Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Amar's Sacrificing ratio} = \frac{1}{2} - \frac{4}{9} = \frac{9-8}{18} = \frac{1}{18}$$

$$\text{Akbar's Sacrificing ratio} = \frac{1}{2} - \frac{3}{9} = \frac{9-6}{18} = \frac{3}{18}$$

Sacrificing Ratio between Amar and Akbar = 1:3.

Page No 168:

Question 27: Given below is the Balance Sheet of A and B, who are carrying on partnership business on 31.12.2016.

A and B share profits and losses in the ratio of 2:1.

Balance Sheet of A and B as on December 31, 2016

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Bills Payable	10,000	Cash in Hand	10,000
Creditors	58,000	Cash at Bank	40,000
Outstanding	2,000	Sundry Debtors	60,000
Expenses		Stock	40,000
Capitals:		Plant	1,00,000
A 1,80,000		Buildings	1,50,000
B 1,50,000	3,30,000		
	4,00,000		4,00,000

C is admitted as a partner on the date of the balance sheet on the following terms:

- (i) C will bring in Rs 1,00,000 as his capital and Rs 60,000 as his share of goodwill for 1/4 share in the profits.
- (ii) Plant is to be appreciated to Rs 1,20,000 and the value of buildings is to be appreciated by 10%.
- (iii) Stock is found over valued by Rs 4,000.
- (iv) A provision for bad and doubtful debts is to be created at 5% of debtors.
- (v) Creditors were unrecorded to the extent of Rs 1,000.

Pass the necessary journal entries, prepare the revaluation account and partners' capital accounts, and show the Balance Sheet after the admission of C.

ANSWER:

Books of A, B and C

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2016 Dec 31	Bank A/c Dr. To C's Capital A/c To Premium for Goodwill A/c (Capital and premium for goodwill brought by C for 1/4 th share)		1,60,000	1,00,000 60,000

	Premium for Goodwill A/c Dr.	60,000	
	To A's Capital A/c		40,000
	To B's Capital A/c		20,000
	(Premium for Goodwill brought by C transferred to old partners' capital account in their sacrificing ratio, 3:1)		
	Plant A/c Dr.	20,000	
	Building A/c Dr.	15,000	
	To Revaluation A/c		35,000
	(Value of assets increased)		
	Revaluation A/c Dr.	8,000	
	To Stock		4,000
	To Provision for Doubtful Debts A/c		3,000
	To Creditors A/c (Unrecorded)		1,000
	(Assets and liabilities revalued)		
	Revaluation A/c Dr.	27,000	
	To A's Capital A/c		18,000
	To B's Capital A/c		9,000
	(Profit on revaluation transferred to old partners' capital account)		

Revaluation Account

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
Stock	4,000	Plant	20,000
Provision for Doubtful Debts	3,000	Building	15,000
Creditors (Unrecorded)	1,000		
Profit transferred to			
A's Capital 18,000			
B's Capital 9,000	27,000		
	35,000		35,000

Partners' Capital Account

Dr.

Cr.

Particulars	A	B	C	Particulars	A	B	C
Balance c/d	2,38,000	1,79,000	1,00,000	Balance b/d	1,80,000	1,50,000	
				Bank			1,00,000
				Premium for Goodwill	40,000	20,000	
				Revaluation	18,000	9,000	
	2,38,000	1,79,000	1,00,000		2,38,000	1,79,000	1,00,000

Balance Sheet as on December 31, 2016

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Bills Payable	10,000	Cash in Hand	10,000
Creditors	59,000	Cash at Bank	2,00,000
Outstanding Expenses	2,000	Sundry Debtors	60,000
Capital:		<i>Less: Provision for Doubtful Debt</i>	3,000
A	2,38,000		57,000
B	1,79,000	Stock	36,000
C	1,00,000	Plant	1,20,000
	5,17,000	Building	1,65,000
	5,88,000		5,88,000

Working Note:

1) Sacrificing ratio = Old Ratio – New Ratio

$$\text{A's Sacrificing Share} = \frac{2}{3} - \frac{2}{4} = \frac{8-6}{12} = \frac{2}{12}$$

$$\text{B's Sacrificing Share} = \frac{1}{3} - \frac{1}{4} = \frac{4-3}{12} = \frac{1}{12}$$

Sacrificing ratio between A and B = 2: 1

Page No 168:

Question 28: Leela and Meeta were partners in a firm sharing profits and losses in the ratio of 5:3. On 1st Jan. 2017 they admitted Om as a new partner. On the date of Om's admission, the balance sheet of Leela and

Meeta showed a balance of Rs 16,000 in general reserve and Rs 24,000 (Cr) in Profit and Loss Account. Record necessary journal entries for the treatment of these items on Om's admission. The new profit sharing ratio between Leela, Meeta and Om was 5:3:2.

ANSWER:

Books of Leela, Meeta and Om

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2017				
Jan 1	General Reserve A/c Dr.		16,000	
	Profit and Loss A/c Dr.		24,000	
	To Leela's Capital A/c			25,000
	To Meeta's Capital A/c			15,000
	(General reserve and balance in Profit and Loss credited to old partners' capital account in their old ratio, 5:3)			

Page No 168:

Question 29: Amit and Viney are partners in a firm sharing profits and losses in 3:1 ratio. On 1.1.2017 they admitted Ranjan as a partner. On Ranjan's admission the profit and loss account of Amit and Viney showed a debit balance of Rs 40,000. Record necessary journal entry for the treatment of the same.

ANSWER:

Books of Amit, Viney and Ranjan
Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2017				
Jan 1	Amit's Capital A/c Dr.		30,000	
	Viney's Capital A/c Dr.		10,000	
	To Profit and Loss, A/c			40,000
	(Debit Balance in Profit and Loss Account written off)			

Page No 168:

Question 30: A and B share profits in the proportions of $\frac{3}{4}$ and $\frac{1}{4}$. Their Balance Sheet on Dec. 31, 2016 was as follows:

Balance Sheet of A and B as on December 31, 2016

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Sundry creditors	41,500	Cash at Bank	26,500
Reserve fund	4,000	Bills Receivable	3,000
Capital Accounts		Debtors	16,000
A	30,000	Stock	20,000
B	16,000	Fixtures	1,000
		Land & Building	25,000
	91,500		91,500

On Jan. 1, 2017, C was admitted into partnership on the following terms:

- (a) That C pays Rs 10,000 as his capital.
- (b) That C pays Rs 5,000 for goodwill. Half of this sum is to be withdrawn by A and B.
- (c) That stock and fixtures be reduced by 10% and a 5% provision for doubtful debts be created on Sundry Debtors and Bills Receivable.
- (d) That the value of land and buildings be appreciated by 20%.
- (e) There being a claim against the firm for damages, a liability to the extent of Rs 1,000 should be created.
- (f) An item of Rs 650 included in sundry creditors is not likely to be claimed and hence should be written back.

Record the above transactions (journal entries) in the books of the firm assuming that the profit sharing ratio between A and B has not changed. Prepare the new Balance Sheet on the admission of C.

ANSWER:

Books of A, B and C

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2017 Jan. 01	Bank A/c Dr. To C's Capital A/c To Premium for Goodwill A/c (Capital and Premium for goodwill brought by C for 1/5 th share)		15,000	10,000 5,000

Jan. 01	Premium for Goodwill A/c		5,000	
	To A's Capital A/c			3,750
	To B's Capital A/c			1,250
	(Amount of goodwill brought by C is transferred to old partners' capital account in their sacrificing ratio, 3:1)			
Jan. 01	A's Capital A/c	Dr.	1,875	
	B's Capital A/c	Dr.	625	
	To Bank A/c			2,500
	(Half of amount withdrawn by old partners)			
Jan. 01	Revaluation A/c	Dr.	4,050	
	To Stock A/c			2,000
	To Fixture A/c			100
	To Provision for doubtful Debts on Debtors A/c			800
	To provision for doubtful Debts on Bills Receivable A/c			150
	To Claim for Damages A/c			1,000
	(Assets and liabilities are revalued)			
Jan. 01	Land and Building A/c	Dr.	5,000	
	Sundry Creditors A/c		650	
	To Revaluation A/c			5,650
	(Asset and liability are revalued)			

Jan. 01	Revaluation A/c	Dr.		1,600	
	To A's Capital A/c				1,200
	To B's Capital A/c				400
	(Profit on Revaluation transferred to old partners' capital)				
Jan. 01	Reserve Fund A/c	Dr.		4,000	
	To A's Capital A/c				3,000
	To B's Capital A/c				1,000
	(Reserve Fund distributed among old partners)				

Balance Sheet as on January 01, 2007

Liabilities		Amount (Rs)	Assets		Amount (Rs)
Sundry Creditors		40,850	Cash at Bank		39,000
Claim for Damages		1,000	Bills Receivable		3,000
A	36,075		Less: Provision	150	2,850
B	18,025		Debtors	16,000	
C	10,000	64,100	Less: Provision	800	15,200
			Stock		18,000
			Fixtures		900
			Land and Building		30,000
		1,05,950			1,05,950

Working Note:

1)

Partners' Capital Account

Dr.

Cr.

Particulars	A	B	C	Particulars	A	B	C
Bank	1,875	625		Balance b/d	30,000	16,000	
Balance c/d	36,075	18,025	10,000	Bank			10,000
				Premium for Goodwill	3,750	1,250	
				Revaluation	1,200	400	
				Reserve Fund	3,000	1,000	
	37,950	18,650	10,000		37,950	18,650	10,000

2)

Bank Account

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
Balance b/d	26,500	A's Capital A/c	1,875
C's Capital A/c	10,000	B's Capital A/c	625
Premium for Goodwill	5,000	Balance c/d	39,000
	41,500		41,500

3) Sacrificing ratio = Old Ratio – New Ratio

$$\text{A's Sacrificing Share} = \frac{3}{4} - \frac{3}{5} = \frac{12-9}{20} = \frac{3}{20}$$

$$\text{B's Sacrificing Share} = \frac{1}{4} - \frac{1}{5} = \frac{5-4}{20} = \frac{1}{20}$$

Note: Assuming that ratio between A and B has not change hence sacrificing ratio should be same as old ratio.

Page No 169:

Question 31: A and B are partners sharing profits and losses in the ratio of 3:1. On 1st Jan. 2017 they admitted C as a new partner for 1/4 share in the profits of the firm. C brings Rs 20,000 as for his 1/4 share in the profits of the firm. The capitals of A and B after all adjustments in respect of goodwill, revaluation of assets and liabilities, etc. has been worked out at Rs 50,000 for A and Rs 12,000 for B. It is agreed that partner's capitals will be according to new profit sharing ratio. Calculate the new capitals of A and B and pass the necessary journal entries assuming that A and B brought in or withdrew the necessary cash as the case may be for making their capitals in proportion to their profit sharing ratio?

ANSWER:

Books of A, B and C

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2017				
Jan. 01	A's Capital A/c Dr.		5,000	
	To Cash A/c (Excess capital withdrawn by A)			5,000
	Cash A/c Dr.		3,000	
	To B's Capital A/c (Capital brought in by B to make in proportion to the profit sharing)			3,000

1) Calculation of New Profit Sharing Ratio

$$C's \text{ Shares} = \frac{1}{4}$$

$$\text{Remaining share} = 1 - \frac{1}{4} = \frac{3}{4}$$

$$A's \text{ new share} = \frac{3}{4} \times \frac{3}{4} = \frac{9}{16}$$

$$B's \text{ new share} = \frac{1}{4} \times \frac{3}{4} = \frac{3}{16}$$

$$\left\{ C's \text{ share} = \frac{1}{4} \times \frac{4}{4} = \frac{4}{16} \right\}$$

New Profit sharing ratio of A, B and C will be 9:3:4

2) New Capital of A and B.

C bring Rs 20,000 for $\frac{1}{4}^{\text{th}}$ share of profit in the new firm.

Thus, total capital of firm on the basis of C's share = $20,000 \times \frac{4}{1} = 80,000$

$$\text{A's Capital} = \frac{9}{16} \times 80,000 = 45,000$$

Thus, A will withdraw = $50,000 - 45,000 = 5,000$

$$\text{B's Capital} = \frac{3}{16} \times 80,000 = 15,000$$

Thus, B's will bring $15,000 - 12,000 = 3,000$

Page No 169:

Question 32: Pinky, Kumar and Roopa partners in a firm sharing profits and losses in the ratio of 3:2:1. S is admitted as a new partner for $\frac{1}{4}$ share in the profits of the firm, which's he gets $\frac{1}{8}$ from Pinky, and $\frac{1}{16}$ each from Kumar and Roopa. The total capital of the new firm after Seema's admission will be Rs 2,40,000. Seema is required to bring in cash equal to $\frac{1}{4}$ of the total capital of the new firm. The capitals of the old partners also have to be adjusted in proportion of their profit sharing ratio. The capitals of Pinky, Kumar and Roopa after all adjustments in respect of goodwill and revaluation of assets and liabilities have been made are Pinky Rs 80,000, Kumar Rs 30,000 and Roopa Rs 20,000. Calculate the capitals of all the partners and record the necessary journal entries for doing adjustments in respect of capitals according to the agreement between the partners?

ANSWER:

1) Calculation of new profit sharing Ratio = Old Ratio – Sacrificing Ratio

$$\text{Pinky} = \frac{3}{6} - \frac{1}{8} = \frac{12-3}{24} = \frac{9}{24}$$

$$\text{Kumar} = \frac{2}{6} - \frac{1}{16} = \frac{16-3}{48} = \frac{13}{48}$$

$$\text{Roopa} = \frac{1}{6} - \frac{1}{6} = \frac{8-3}{48} = \frac{5}{48}$$

New profit sharing ratio between Pinky, Qumar, Roopa and Seema

$$\frac{9}{48} : \frac{13}{48} : \frac{5}{48} : \frac{1}{4} = \frac{18}{48} : \frac{13}{48} : \frac{5}{48} : \frac{12}{48} = 18 : 13 : 5 : 12$$

2) Required capital of all partners in the new firm

$$\text{Pinky's Capital} = 2,40,000 \times \frac{18}{48} = 90,000$$

$$\text{Qumar's Capital} = 2,40,000 \times \frac{13}{48} = 65,000$$

$$\text{Roopa's Capital} = 2,40,000 \times \frac{5}{48} = 25,000$$

$$\text{Seema's Capital} = 2,40,000 \times \frac{12}{48} = 60,000$$

3) Amount to be brought by each partner

$$\text{Pinky} = 90,000 - 80,000 = 10,000$$

$$\text{Qumar} = 65,000 - 30,000 = 35,000$$

$$\text{Roopa} = 25,000 - 20,000 = 5,000$$

$$\text{Seema} = 2,40,000 \times \frac{1}{4} = 60,000$$

Books of Pinky, Qumar, Roopa and Seema
Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
	Bank A/c Dr. To Seema Capital A/c (Seema bring her share of Capital for 1/4 th share of profit)		60,000	60,000
	Bank A/c Dr. To Pinky's Capital A/c To Qumar's Capital A/c To Roopa's Capital A/c (Amount brought by Pinky, Qumar and Roopa to make capital equal to their proportion)		50,000	10,000 35,000 5,000

Page No 170:

Question 33: The following was the Balance Sheet of Arun, Bablu and Chetan sharing profits and losses in the ratio of $\frac{6}{14} : \frac{5}{14} : \frac{3}{14}$ respectively.

Liabilities		Amount (Rs)	Assets	Amount (Rs)
Creditors		9,000	Land and Buildings	24,000
Bills Payable		3,000	Furniture	3,500
Capital Accounts			Stock	14,000
Arun	19,000		Debtors	12,600
Bablu	16,000		Cash	900
Chetan	8,000	43,000		
		55,000		55,000

They agreed to take Deepak into partnership and give him a share of $\frac{1}{8}$ on the following terms:

- that Deepak should bring in Rs 4,200 as goodwill and Rs 7,000 as his Capital;
- that furniture be depreciated by 12%;
- that stock be depreciated by 10%;
- that a Reserve of 5% be created for doubtful debts;
- that the value of land and buildings having appreciated be brought upto Rs 31,000;
- that after making the adjustments the capital accounts of the old partners (who continue to share in the same proportion as before) be adjusted on the basis of the proportion of Deepak's Capital to his share in the business, i.e., actual cash to be paid off to, or brought in by the old partners as the case may be.

Prepare Cash Account, Profit and Loss Adjustment Account (Revaluation Account) and the Opening Balance Sheet of the new firm.

ANSWER:

Books of Arun, Bablu, Chetan and Deepak

Profit and Loss Adjustment Account

(Revaluation Account)

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
Furniture	420	Land and Buildings	7,000
Stock	1,400		
Reserve for Doubtful Debts	630		
Profit on revaluation			
Profit transferred to			
Arun's Capital	1,950		
Bablu's Capital	1,625		
Chetan's Capital	975		
	4,550		
	7,000		7,000

Cash Account

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
Balance b/d	900	Arun's Capital	1,750
Chetan's Capital	625	Bablu's Capital	1,625
Deepak's Capital	7,000	Balance c/d	9,350
Premium for Goodwill	4,200		
	12,725		12,725

Balance Sheet

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	9,000	Land and Buildings	31,000
Bills Payable	3,000	Furniture	3,080
Capital Account		Stock	12,600
Arun	21,000	Debtor	12,600
Bablu	17,500	Less: Reserve for Doubtful Debt	630
Chetan	10,500	Cash	9,350
Deepak	7,000		
	56,000		
	68,000		68,000

Working Note:

1)

Partner's Capital Account

Dr.

Cr.

Particulars	Arun	Bablu	Chetan	Deepak	Particulars	Arun	Bablu	Chetan	Deepak
Bank	1,750	1,625			Balance b/d	19,000	16,000	8,000	
Balance c/d	21,000	17,500	10,500	7,000	Cash A/c				7,000
					Premium for goodwill	1,800	1,500	900	
					Revaluation Bank	1,950	1,625	975	
							625		
	22,750	19,125	10,500	7,000		22,750	19,125	10,500	7,000

2) Calculation of New Profit Sharing Ratio

$$\text{Deepak's Share} = \frac{1}{8}$$

$$\text{Remaining Share} = 1 - \frac{1}{8} = \frac{7}{8}$$

$$\text{Arun's New Share} = \frac{6}{14} \times \frac{7}{8} = \frac{42}{112}$$

$$\text{Bablu's New Share} = \frac{5}{14} \times \frac{7}{8} = \frac{35}{112}$$

$$\text{Chetan's New Share} = \frac{3}{14} \times \frac{7}{8} = \frac{21}{112}$$

New Profit sharing ratio of Arun, Bablu, Chetan and Deepak

$$= \frac{42}{112} : \frac{35}{112} : \frac{21}{112} \text{ or } \frac{42}{112} : \frac{35}{112} : \frac{21}{112} : \frac{14}{112}$$

$$= 42:35:21:14 \text{ or } 6:5:3:2$$

3) Calculation of capital of Arun, Bablu, and Chetan in the new firm

Deepak bring Rs 7,000 for $\frac{1}{8}$ th share of profit.

Hence total capital of the new firm = $7,000 \times \frac{8}{1} = 56,000$ ‘

Arun's Capital = $56,000 \times \frac{6}{16} = 21,000$

Bablu's Capital = $56,000 \times \frac{5}{16} = 17,500$

Chetan's Capital = $56,000 \times \frac{3}{16} = 10,500$

Page No 170:

Question 34: Azad and Babli are partners in a firm sharing profits and losses in the ratio of 2:1. Chintan is admitted into the firm with $\frac{1}{4}$ share in profits. Chintan will bring in Rs 30,000 as his capital and the capitals of Azad and Babli are to be adjusted in the profit sharing ratio. The Balance Sheet of Azad and Babli as on December 31, 2016 (before Chintan's admission) was as follows:

Balance Sheet of A and B as on 31.12.2016

Liabilites	Amount (Rs)	Assets	Amount (Rs)
Creditors	8,000	Cash in hand	2,000
Bills payable	4,000	Cash at bank	10,000
General reserve	6,000	Sundry debtors	8,000
Capital accounts:		Stock	10,000
Azad 50,000		Furniture	5,000
Babli 32,000	82,000	Machinery	25,000
		Buildings	40,000
	1,00,000		1,00,000

It was agreed that:

- i) Chintan will bring in Rs 12,000 as his share of goodwill premium.
- ii) Buildings were valued at Rs 45,000 and Machinery at Rs 23,000.
- iii) A provision for doubtful debts is to be created @ 6% on debtors.
- iv) The capital accounts of Azad and Babli are to be adjusted by opening current accounts.

Record necessary journal entries, show necessary ledger accounts and prepare the Balance Sheet after admission.

ANSWER:

Books of Azad, Babli and Chintan

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2016				
Dec 31	Bank A/c Dr.		42,000	
	To Chintan's Capital A/c			30,000
	To Premium for Goodwill A/c			12,000
	(Chintan brought Capital and Premium for Goodwill for ¼ share of profit)			
	Premium for Goodwill A/c Dr.		12,000	
	To Azad's Capital A/c			8,000
	To Babli's Capital A/c			4,000
	(Goodwill brought by Chintan transferred to old partners' capital account in their sacrificing ratio, 2:1)			
	General Reserve A/c Dr.		6,000	
	To Azad's Capital A/c			4,000
	To Babli's Capital A/c			2,000
	(General reserve distributed between old partners)			
	Building A/c Dr.		5,000	
	To Revaluation A/c			5,000
	(Increase in value of Building adjusted)			
	Revaluation A/c Dr.		2,480	
	To Machinery A/c			2,000
	To Provision for Doubtful Debt			480
	(Decrease in value of machinery adjusted and Provision for Doubtful Debt created)			

Revaluation A/c	Dr.	2,520	
To Azad is Capital A/c			1,680
To Babli's Capital A/c			840
(Profit on revaluation transferred to Azad and Babli's Capital Account)			
Azad's Capital A/c	Dr.	3,680	
To Azad's Current A/c			3,680
(Excess of Capital transferred to current account)			
Babli's Capital A/c	Dr.	8,840	
To Babli's Current A/c			8,840
(Excess of Capital transferred to current account)			

Revaluation Account

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
To Machinery	2,000	Building	5,000
To Provision for Doubtful Debt	480		
To Profit transferred to			
Azad's Capital	1,680		
Babli's Capital	840		
	2,520		
	5,000		5,000

Partner's Capital Account

Dr.**Cr.**

Particulars	Azad	Babli	Chintan	Particulars	Azad	Babli	Chintan
Current A/c	3,680	8,840		Balance b/d	50,000	32,000	
Balance c/d	60,000	30,000	30,000	Bank			30,000
				Premium for Goodwill	8,000	4,000	
				General Reserve	4,000	2,000	
				Revaluation	1,680	840	
	63680	38,840	30,000		63680	38,840	30,000

Balance Sheet as on December 31, 2006

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Creditors	8,000	Cash in Hand	2,000
Bills Payable	4,000	Cash at Bank	52,000
Current Accounts:		Sundry Debtors	8,000
Azad	3,680	Less: Provision for Doubtful debt	480
Babli	8,840	Stock	10,000
Capital Accounts:		Furniture	5,000
Azad	60,000	Machinery	23,000
Babli	30,000	Building	45,000
Chintan	30,000		
	1,44,520		1,44,520

Working Note:

1) Calculation of New Profit Sharing Ratio

$$\text{Chintan's Share} = \frac{1}{4}$$

$$\text{Remaining Share of firm} = 1 - \frac{1}{4} = \frac{3}{4}$$

$$\text{Azad's New Share} = \frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$$

$$\text{Babli's New Share} = \frac{1}{3} \times \frac{3}{4} = \frac{3}{12}$$

New Profit sharing ratio of Azad, Babli and Chintan

$$= \frac{6}{12} : \frac{3}{12} : \frac{1}{4} \text{ or } \frac{6}{12} : \frac{3}{12} : \frac{3}{12} \text{ or } 6 : 3 : 3 \text{ or } 2 : 1 : 1$$

2) New Capital of Azad, and Babli

Chintan bring Rs 30,000 for $\frac{1}{4}$ share of profit. Hence total capital of a firm = $30,000 \times \frac{4}{1} = 1,20,000$

$$\text{Azad's Capital} = 1,20,000 \times \frac{2}{4} = 60,000$$

$$\text{Babli's Capital} = 1,20,000 \times \frac{1}{4} = 30,000$$

Page No 171:

Question 35: Ashish and Dutta were partners in a firm sharing profits in 3: 2 ratio. On Jan. 01, 2015 they admitted Vimal for $\frac{1}{5}$ share in the profits. The Balance Sheet of Ashish and Dutta as on Jan. 01, 2016 was as follows:

Balance Sheet of A and B as on 1.1.2016

Liabilites	Amount Rs	Assets	Amount Rs
Creditors	15,000	Land & Building	35,000
Bills Payable	10,000	Plant	45,000
Ashish Capital	80,000	Debtors	22,000
Dutta's Capital	35,000	Less : Provision	2,000
		Stock	35,000
		Cash	5,000
	1,40,000		1,40,000

It was agreed that:

- i) The value of Land and Building be increased by Rs 15,000.
- ii) The value of plant be increased by 10,000.
- iii) Goodwill of the firm be valued at Rs 20,000.
- iv) Vimal to bring in capital to the extent of $\frac{1}{5}$ th of the total capital of the new firm.

Record the necessary journal entries and prepare the Balance Sheet of the firm after Vimal's admission.

ANSWER:

Books of Ashish, Dutta and Vimal

Journal

Date	Particulars	L.F.	Amount Rs	Amount Rs
2016				
Jan 1	Land and Building A/c Dr.		15,000	
	Plant A/c Dr.		10,000	
	To Revaluation A/c			25,000
	(Increased in the value of assets)			
	Revaluation A/c Dr.		25,000	
	To Ashish's Capital A/c			15,000
	To Dutta's Capital A/c			10,000
	(Profit on revaluation transferred to partners' capital account)			
	Cash A/c Dr.		36,000	
	To Vimal Capital A/c			36,000
	(Capital brought by Vimal)			
	Vimal's Current A/c Dr.		4,000	
	To Ashish's Capital A/c			2,400
	To Dutta's Capital A/c			1,600
	(Vimal's share goodwill adjusted through his current account)			

Balance Sheet as on January 01, 2016

Liabilities	Amount Rs	Assets	Amount Rs
Creditors	15,000	Land and Building	50,000
Bills Payable	10,000	Plant	55,000
		Debtors	22,000
Ashish's Capital Account	97,400	Less: Provision	2,000
Dutta's Capital Account	46,600	Stock	35,000
Vimal's Capital Account	36,000	Cash	41,000
		Vimal's Current Account	4,000
	2,05,000		2,05,000

Working Note:

1)

Partners' Capital Account

Dr.

Cr.

Particulars	Ashish	Dutta	Vimal	Particulars	Ashish	Dutta	Vimal
				Balance b/d	80,000	35,000	
				Revaluation	15,000	10,000	
Balance c/d	97,400	46,600	36,000	Cash			36,000
				Vimal Current	2,400	1,600	
	97,400	46,600	36,000		97,400	46,600	36,000

2)

Vimal Current Account

Dr.

Cr.

Particulars	Amount Rs	Particulars	Amount Rs
Ashish's Capital A/c	2,400	Balance c/d	4,000
Dutta's Capital A/c	1,600		
	4,000		

3) Calculation of New Profit Sharing Ratio

$$\text{Vimal's Share} = \frac{1}{5}$$

$$\text{Remaining Share of firm} = 1 - \frac{1}{5} = \frac{4}{5}$$

$$\text{Ashish's share in the new firm} = \frac{3}{5} \times \frac{4}{5} = \frac{12}{25}$$

$$\text{Dutta's share in the new firm} = \frac{2}{5} \times \frac{4}{5} = \frac{8}{25}$$

New Profit sharing ratio of Ashish, Dutta and Vimal

$$= \frac{12}{25} : \frac{8}{25} : \frac{1}{5} \text{ or } \frac{12}{25} : \frac{8}{25} : \frac{5}{25} \text{ or } 12 : 8 : 5$$

4) Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Ashish's Sacrificing Share} = \frac{3}{5} - \frac{12}{25} = \frac{15-12}{25} = \frac{3}{25}$$

$$\text{Dutta's Sacrificing Share} = \frac{2}{5} - \frac{8}{25} = \frac{10-8}{25} = \frac{2}{25}$$

Sacrificing Ratio between Ashish and Dutta is 3:2

Note: Here, Goodwill has been adjusted through current account because Vimal has not brought his share of goodwill and he is to bring capital in proportion to total capital of the new firm after adjustment.

5) Capital of new firm on the basis of old partners adjusted capital:

Total adjusted capital of old partners

Ashish's Capital = 97,400

Dutta's Capital = $\frac{46,600}{1,44,000}$

Remaining Share of Ashish and Dutta (old partners) in the new firm = $\frac{4}{5}$

Capital of the new firm = $1,44,000 \times \frac{5}{4} = 1,80,000$

Vimal's share in the capital of the new firm = $1,80,000 \times \frac{1}{5} = 36,000$.