

Short Questions for NCERT Accountancy Solutions Class 12 Part 1 Chapter 3

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

The following matters need adjustment when adding a new partner:

1. Capital Adjustment among partners.
2. Revised calculation of profit sharing ratio.
3. Evaluating and adjusting the goodwill of partners who are sacrificing their share.
4. Accumulated profits, reserves and losses should be distributed to old partners as per the old ratio that was agreed upon.
5. Revaluation of the Liabilities and Assets to determine the current value and distribution of profit or loss as per the old ratio.

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

At the time of admission of a new partner, the existing partners sacrifice their present profit-sharing ratio to make way for a share in profit sharing to the new partner, which results in reducing their profit. Therefore, it is essential to determine the new profit-sharing ratio for old partners on the occasion of adding a new partner, as it creates a more justified share of profit.

3. What is sacrificing ratio? Why is it calculated?

The portion of the profit-sharing ratio that is sacrificed by current partners when a new partner joins the firm is called as sacrificing ratio. It is calculated as the difference between the old profit-sharing ratio and the new profit-sharing ratio.

$\text{Sacrificing ratio} = \text{Old profit sharing ratio} - \text{New profit sharing ratio}$

It is compulsory to determine this ratio, as the new partner has to reimburse the existing partner for making the sacrifice of profit. It is paid to them as goodwill.

4. On what occasions is sacrificing ratio used?

Sacrificing ratio needs to be used in these occasions:

1. When it is mutually decided by the partners of the firm to change the profit-sharing ratio among the partners.
2. A new partner is introduced in the firm, and accordingly, the sum contributed by the new partner is distributed as goodwill based on the sacrificing ratio of existing partners.

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 the existing amount of goodwill?

The goodwill that exists in the firms before the arrival of a new partner must be written off between the existing partners in the ratio of their profit sharing as previously decided. The following journal entry needs to be passed:

Old Partner's Capital A/c

Dr.

To Goodwill A/c

(Being goodwill written off in the old ratio between existing partners)

6. Why is there a need for the revaluation of Liabilities and Assets on the admission of a partner?

When a new partner gets admitted to the firm, there is a need to revalue the Liabilities and Assets of the firm to determine the true value on that day. Revaluation is helpful as the value of Liabilities and Assets may increase or decrease, and as such, their values in the old balance sheet may not be justified; also, some assets or liabilities may not be recorded at all. Hence, for recording the changes in market value for the Liabilities and Assets, a revaluation account is to be prepared, and the associated profits or losses need to be distributed between the existing partners of the firm.

Long Questions for NCERT Accountancy Solutions Class 12 Part 1 Chapter 3

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

It is logical to revalue Liabilities and Assets when a new partner gets admitted to the firm, as it is helpful in determining their true value of them on that day. Revaluation is helpful as the value of Liabilities and Assets may increase or decrease, and as such, their values in the existing balance sheet may not be justified; also, some assets or liabilities may not be recorded at all. Hence, for recording the changes in market value for the Liabilities and Assets, a revaluation account is needed to be prepared, and the associated profits or losses need to be distributed between the existing partners of the firm.

Following journal entries are added to the account on the date a new partner is admitted to a firm.

i. When asset value increases:

Assets A/c Dr.

To Revaluation A/c

(For increase in asset value)

ii) When asset value decreases.

Revaluation A/c	Dr.
To Asset A/c	
(For Decrease in asset value)	

iii) When Liabilities increase.

Revaluation A/c	Dr.
To Liabilities A/c	
(For increase in liabilities value)	

iv) When liabilities decrease.

Liability A/c	Dr.
To Revaluation A/c	
(For decrease in liabilities value)	

v) To record assets that are unrecorded.

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

vi) To record liabilities that are unrecorded.

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

vii) Transferring credit balance of Revaluation account.

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

(Transfer of profit earned from Revaluation to Old Partners as per existing profit sharing ratio)

vii) Transferring debit balance of Revaluation account.

Old Partner's Capital A/c	Dr.
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	To Revaluation A/c
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(Transfer of loss on revaluation to Old Partners as per existing profit sharing ratio)

2. What is goodwill? What are the factors that affect goodwill?

Goodwill refers to the intangible asset that represents the firm's value and reputation and the brand name that it carries in the market. Goodwill is earned by a firm from the work it does, which helps earn people's trust by meeting all customer demands both in quality and quantity. Having positive goodwill is very much helpful for a firm to earn extraordinary profits in comparison to its competitors. It also ensures profits that keep coming in the future and helps in retaining old customers.

Factors affecting firms' goodwill are

1. **Product Quality:** A firm which is constantly delivering the best product for its customers will have greater goodwill.
2. **Location:** A central location makes it easy to reach and attracts more footfall, which leads to higher sales and more goodwill.
3. **Management:** Cost efficiency and higher productivity can be achieved by having efficient management in place; also, it ensures quality products at less price, which increases goodwill.
4. **Market Structure:** A firm will enjoy more benefits of goodwill if the market is monopolistic in nature and there are no substitutes; it will add more goodwill to the firm.

5. Other Advantages: A firm that is getting benefits such as the continuous supply of fuel, power and raw materials and uses them to produce quality goods enjoys higher goodwill.

3. Explain various methods of valuation of goodwill.

There are four different methods of goodwill valuation:

1. Average Profit Method: In this method, the calculation of goodwill is done based on the average profits of the past years. It can be calculated as

Goodwill = Average Profit × No. of Years Purchase

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

Here, the number of years of purchase signifies the years till which the firm expects profits to generate in the same way as the current period

The following steps are involved in this method:

1. Determine the total profit of past years.
2. Add all losses which are abnormal in nature, such as theft, fire, etc.
3. Add all normal income, if not done previously.
4. Deduct all incomes that are not obtained from business and all such abnormal incomes, for e.g., winning a lottery.
5. Deduct all normal expenses, if not deducted previously.
6. Calculate the average profit by dividing the total profit determined in the previous step.
7. Multiply the average profit hence obtained by the number of year's purchases in order to determine goodwill.

Example:

Last 5 years profits are 3,00,000, 9,00,000, (6,00,000), 15,00,000, 24,00,000.

Goodwill calculated as

$$\text{Average Profit} = \frac{3,00,000 + 9,00,000 + 15,00,000 + 24,00,000 - 6,00,000}{5} = \frac{45,00,000}{5}$$

$$= 9,00,000$$

$$\text{Goodwill} = 9,00,000 \times 4 = 36,00,000$$

2. Weight Average Method: In this method, weights are allocated to each year's profit, with the highest weight given to the recent year's profit and lower weights marked for the past years' profits. The product of the profits and weights are added and divided by the total weight to determine weighted average profits. It is a modified version of the **Average Profit Method**. The following formulae are used.

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

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

The following steps are involved:

1. Assign the highest weightage to the recent year's profit and the lowest weightage to the past years' profits.
2. Multiply weights with the profits corresponding to each year.
3. Determine the product's total.
4. Divide the product total by the total weightage to find the Weighted Average Profit.
5. Multiply the weighted average profit by the number of years purchased.

For example,

Last 5 years profits are ₹ 3,00,000, ₹ 9,00,000, ₹ (6,00,000), ₹ 15,00,000, ₹ 24,00,000.

Goodwill calculated as,

Profit/Loss ₹	Weights	Product ₹
3,00,000	1	3,00,000 × 1 = 3,00,000

9,00,000	2	$9,00,000 \times 2 = 18,00,000$
(6,00,000)	3	$(6,00,000) \times 3 = (18,00,000)$
15,00,000	4	$15,00,000 \times 4 = 60,00,000$
24,00,000	5	$24,00,000 \times 5 = 1,20,00,000$
Total	15	₹ 1,83,00,000

$$\text{Weighted Average Profit} = \frac{1,83,00,000}{15} = 1,220,000$$

$$\begin{aligned}\text{Goodwill} &= 1,220,000 \times 4 \\ &= 4,880,000\end{aligned}$$

3. Super Profit Method: In this method, goodwill is determined by the excess profit earned by a firm as compared to profit earned by rivals in the same industry. The excess profit earned over normal profit is called a Super Normal Profit

The following steps are involved:

1. Calculate the average profit
2. Calculating average capital engaged

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

$$\text{Capital Employed} = \text{All Assets} - \text{Goodwill} - \text{Fictitious Assets} - \text{External Liabilities}$$

3. Calculating normal profit

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

4. Calculation of Super Normal Profit using the formulae: Super Normal Profit = Average Profit – Normal Profit

5. Multiply super normal profit with the number of years the purchase to determine goodwill.

4. Capitalisation Method: Goodwill is determined in two ways as follows:

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

a) By Average Profit capitalisation

The following steps are involved:

1. Average profit is calculated.
2. Calculating average profits capitalised value using the formulae.

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

3. Determine Actual Capital Employed
4. Deduct Actual Capital Employed from Capitalised Average Profit to calculate goodwill.

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

b) By Super Profit capitalisation.

The following steps are involved:

1. Capital Employed for calculation
2. Calculation of Normal profit

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

3. Calculation of average profit

4. Calculating Super Normal Profit

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

Step 5: Goodwill calculation by the following formula:

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

4. If it is agreed that the capital of all the partners is 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.

When a new partner is admitted to the firm, the capital of all partners must be determined using the new profit-sharing ratio. In such cases new capital of each partner is determined and is dependent on the following instances:

1. New partner's capital is given
2. Firm's total capital is given

1) New partner's capital is given

It involves the following steps:

1. Calculation of the total capital of the firm based on the new partners' capital.
2. Divide the total capital of the firm by individual shares of the partner's profits to determine each partner's new capital.
3. After posting adjustments, determine each partner's capital balance.
4. The capital determined previously is written in the Partners Capital account on the credit side.
5. Calculation of surplus or deficit. If new capital is more than the old share, then it needs to be contributed by old partners and is termed deficit, and if new capital is less than old capital, it is called surplus and the difference is paid to old partners.

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

A & B are partners in business who share profits and losses equally. They agree to admit C for $\frac{1}{3}$ rd share in profit. C brings ₹ 1, 00,000 as capital. A and B have old capital of ₹ 80,000 and ₹ 60,000, respectively, at the time of admission of C.

1. The total capital of the new firm on the basis of C = $1,00,000 \times \frac{3}{1} = 3,00,000$

2. A's new capital = $3,00,000 \times \frac{1}{3} = 1,00,000$

B's share in new firm = $3,00,000 \times \frac{1}{3} = 1,00,000$

Step 3:

	A	B
New Capital	100,000	100,000
Less: Existing Capital	(80,000)	(60,000)
Withdrawal (deposit)	(20,000)	(40,000)

So both A and B need to pay 20,000 and 40,000 more as shares for their new capital.

2) When new firms' total capital is known:

When the new partner's capital is not mentioned, then new capital is determined based on the total capital of the firm on a proportionate basis. The amount that is determined has to be brought in by the new partner as capital. The following steps are taken to determine the new partners' capital:

1. Finding the total old capital of the existing partners after performing all adjustments.
2. Finding the total capital of the new firm by multiplying the old capital of existing partners with the reciprocal of the old partner's total share.

$$\text{Total Capital of New Firm} = \text{Total Capital of the Old Partners} \times \text{Reciprocal of the Combined New Share of the Old Partners}$$

3. The new capital of each partner is determined on the basis of the total capital calculated, which is multiplying the new profit ratio with the total capital, individually, for all partners. Here is an example to help you understand the concept.

Ram and Shyam are partners in a firm, sharing profit and loss equally. They agreed to admit Anil for $\frac{1}{3}$ rd share in profit and decided to share future profit and loss equally. X's capital is ₹ 1, 00,000 and Y's capital is ₹ 50,000. Z brings sufficient capital for his share in profit.

1. Old Capital= ₹ 1, 00,000 + 50,000 = 1, 50,000

2. Calculation of total capital

Total Capital of New Firm = Total Capital of the Old Partners
× Reciprocal of the Combined New Share of the Old Partners

$$\text{Total Capital of New Firm} = 1, 50, 000 \times \frac{3}{2} = 2, 25, 000$$

3. New Partners Capital

$$\text{Ram's capital} = 2, 25, 000 \times \frac{3}{1} = 75,000$$

$$\text{Shyam's capital} = 2, 25, 000 \times \frac{3}{1} = 75,000$$

$$\text{Anil's Capital: } 2, 25, 000 \times \frac{3}{1} = 75,000$$

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

In a situation in which a new partner is unable to bring his share of goodwill in cash, the goodwill account gets adjusted through the Old Partners account. The new partners' capital account is debited with the share of goodwill, and the same gets credited to Old Partner's account.

New Partner's Capital A/c	Dr.
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To Old Partners' Capital A/c	
(New Partner account debited)	

Note: According to Para 16 of Accounting Standard 10, Goodwill is recorded only when it is any transaction equivalent to money or money's worth. It is a mandatory practice that is followed.

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

Goodwill is treated in the following ways on the introduction of a new partner:

1. Premium Method
2. Revaluation Method

When a new partner pays the share of goodwill in the form of cash, it is called a premium method. There can be two scenarios:

1. New partners pay directly to old partners
2. Partner brings goodwill in the form of cash, and it is retained in the business.

The corresponding entries are:

(i) When goodwill brought in cash by the new partner

Cash/Bank A/c Dr.

To Premium for Goodwill A/c

(Amount of goodwill brought in by new partner)

(ii) When goodwill is retained by the business:

Premium for Goodwill A/c Dr

To Sacrificing Partners' Capital A/c

(Goodwill brought by the new partner is distributed among old partners as per the sharing ratio.)

Revaluation Method: Situations when a new partner is unable to bring goodwill in the form of cash.

New Partner's Capital A/c Dr. (Goodwill amount not brought by new partner)

To Old Partners' Capital A/c

(Goodwill of new partner distributed to old partners as per their sharing ratio.)

Note: According to Para 16 of Accounting Standard 10, Goodwill is recorded only when it is any transaction equivalent to money or money's worth. It is a mandatory practice that is followed.

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

A new partner is not entitled to bear the losses or enjoy the profits of a previous business. Hence, when a new partner is added to the firm, the accumulated profits or losses or reserves need to be distributed to current partners (partners of the old firm) in their profit-sharing ratio.

Treatment of accumulated losses, profits and reserve.

Profit and Loss A/C Dr.

General Reserve A/C Dr.

Contingency Reserve A/C Dr.

When losses accumulate over a period.

For Profits and losses

Deferred Advertising expense Dr.

(Losses accumulated shared to old partners as per sharing ratio)

8. At what figures does the value of Liabilities and Assets appear in the books of the firm after revaluation has been done? Show with the help of an imaginary balance sheet.

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

Anil and Bijay shares profit and loss equally.

Balance Sheet of A and B as on April 01, 2019			
Liabilities	Amount ₹	Assets	Amount ₹
Sundry Creditors	1,00,000	Cash in Hand	8,000
Capital Accounts		Cash at Bank	1,78,000
Anil 1,50,000		Debtors	40,000
Bijay 1,50,000	3,00,000	Stock	36,000
		Furniture	38,000
		Plant and Machinery	1,00,000
	4,00,000		4,00,000

- 1) On that date, Chetan is admitted as he is the new partner for $\frac{1}{3}$ rd share and offers 2,00,000 as capital.
- 2) Value of stocks increased by ₹ 7,000.
- 3) A ₹ 2,000 provision has been created against Debtors.
- 4) ₹ 35,000 value obtained after revaluing furniture.
- 5) A machinery costing ₹ 100,000 purchased is not recorded in books.

6) Outstanding rent ₹ 2,000.

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

Revaluation Account					
Dr.					Cr.
Particular		Amount	Particular		Amount
		₹			₹
Rent Outstanding A/c		2,000	Stock		7,000
Provision for Debtors		2,000	Machinery		100,000
Furniture		35,000			
Profit transferred:					
Anil's Capital A/c	50,000				
Bijay's Capital A/c	50,000	100,000			
		107,000			107,000

Anil's Capital Account							
Dr.				Cr.			
Date	Particular	J.F.	Amount	Date	Particular	J.F.	Amount
			₹				₹
	Balance c/d		2,00,000		Balance b/d		150,000

					Revaluation A/c		50,000
			2,00,000				2,00,000

Bijay's Capital Account

Dr.							Cr.
Date	Particular	J.F.	Amount ₹	Date	Particular	J.F.	Amount ₹
	Balance c/d		2,00,000		Balance b/d		150,000
					Revaluation A/c		50,000
			2,00,000				2,00,000

Chetan's Capital Account

Dr.							Cr.
Date	Particular	J.F.	Amount ₹	Date	Particular	J.F.	Amount ₹
	Balance c/d		2,00,000		Cash A/c		2,00,000
			2,00,000				2,00,000

Cash Account

Dr.							Cr.

Date	Particular	J.F.	Amount ₹	Date	Particular	J.F.	Amount ₹
	Balance b/d		8,000		Balance c/d		2,08,000
	Chetan's Capital A/c		2,00,000				
			2,08,000				2,08,000

Balance Sheet of Anil, Bijay & Chetan as of April

Liabilities		Amount ₹	Assets		Amount ₹
Sundry Creditors		1,00,000	Cash in hand		2,08,000
Rent Outstanding		2,000	Cash at Bank		178,000
			Debtors	40,000	
			Less: Provision	2,000	38,000
Capital Account					
Anil	2,00,000		Stock		43,000
Bijay	2,00,000		Furniture		35,000
Chetan	2,00,000	6,00,000	Plant and Machinery		2,00,000
		7,02,000			7,02,000

Numerical Question for NCERT Accountancy Solutions Class 12 Part 1 Chapter 3

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

The solution is as follows:

$$\begin{array}{lcl} \text{A} & : & \text{B} \\ \text{Old Ratio} & 3 & : \quad 2 \\ & \text{OR} & \\ & \frac{3}{5} & : \quad \frac{2}{5} \end{array}$$

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 = $1 - \text{C's share}$

$$\begin{aligned} &= 1 - \frac{1}{6} \\ &= \frac{5}{6} \end{aligned}$$

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

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

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

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

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

$$\begin{aligned} \text{New Ratio} &= \begin{matrix} A & : & B & : & C \\ \frac{15}{30} & & \frac{10}{30} & : & \frac{1}{6} \end{matrix} \\ &= \frac{15 : 10 : 5}{30} \\ &= 15 : 10 : 5 \\ &= 3 : 2 : 1 \end{aligned}$$

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.

The solution is as follows:

$$\begin{aligned} \text{Old Ratio} &= \begin{matrix} A : B : C \\ 3 : 2 : 1 \end{matrix} \\ &= \frac{3}{6} : \frac{2}{6} : \frac{1}{6} \end{aligned}$$

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 share

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

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

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

New Ratio = Old Ratio × Remaining Share of A, B and C in the 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	:	D	
New Ratio =	$\frac{27}{60}$:	$\frac{18}{60}$:	$\frac{9}{60}$:	$\frac{1}{10}$	$= \frac{27:18:9:6}{60}$
	$= 9:6:3:2$							

3. X and Y are partners sharing profits in 5:3 ratio admitted Z for 1/10 share, which he acquired equally for X and Y. Calculate the new profit-sharing ratio.

The solution is as follows:

Old Ratio =

A: B
5: 3

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

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

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

New Ratio = Old Ratio - Sacrificing Ratio

$$X's = \frac{5}{8} - \frac{1}{20} = \frac{25-2}{40} = \frac{23}{40}$$

$$Y's = \frac{3}{8} - \frac{1}{20} = \frac{15-2}{40} = \frac{13}{40}$$

New Ratio= A: B: C
 $\frac{23}{40}$: $\frac{13}{40}$: $\frac{1}{10}$

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

$$= 23:13:4$$

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 the new profit-sharing ratio.

The solution to this question is as follows:

$$\begin{aligned} & \text{A : B : C} \\ \text{Old Ratio} &= 2 : 2 : 1 \\ &= \frac{2}{5} : \frac{2}{5} : \frac{1}{5} \end{aligned}$$

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

$$\begin{aligned} \text{A} &= \frac{2}{5} - \frac{1}{8} \\ &= \frac{16-5}{40} \\ &= \frac{11}{40} \end{aligned}$$

$$\begin{aligned} & \text{A : B : C : D} \\ \text{New Ratio} &= \frac{11}{40} : \frac{2}{5} : \frac{1}{5} : \frac{1}{8} = \frac{11:16:8:5}{40} \\ &= 11:16:8:5 \end{aligned}$$

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

The solution to this question is as follows:

$$\begin{aligned} & \text{P : Q} \\ \text{Old Ratio} &= 2 : 1 \\ &= \frac{2}{3} : \frac{1}{3} \end{aligned}$$

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.

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

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

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

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

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

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

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

6. A, B and C are partners sharing profits in 3:2:2 ratio. 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 the new profit-sharing ratio.

The solution to this question is as follows:

$$\begin{aligned} & \text{A : B : C} \\ \text{Old Ratio} &= 3 : 2 : 2 \\ &= \frac{3}{7} : \frac{2}{7} : \frac{2}{7} \end{aligned}$$

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.

$$\begin{aligned} \text{A's sacrifice} &= \text{D's share} \times \frac{2}{5} \\ &= \frac{1}{5} \times \frac{2}{5} = \frac{2}{25} \end{aligned}$$

$$\begin{aligned} \text{B's sacrifice} &= \text{D's share} \times \frac{2}{5} \\ &= \frac{1}{5} \times \frac{2}{5} = \frac{2}{25} \end{aligned}$$

$$\begin{aligned} \text{C's sacrifice} &= \text{D's share} \times \frac{1}{5} \\ &= \frac{1}{5} - \frac{1}{5} = \frac{1}{25} \end{aligned}$$

New Ratio = Old Ratio – Sacrificing Ratio

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

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

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

$$= \frac{50-14}{175} = \frac{36}{175}$$

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

$$= \frac{50-7}{175} = \frac{43}{175}$$

$$\begin{array}{l} \text{A : B : C : D} \\ \text{New Ratio} = \frac{61}{175} : \frac{36}{175} : \frac{43}{175} : \frac{1}{5} \\ = \frac{61:36:43:35}{175} \\ = 61:36:43:35 \end{array}$$

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

The solution to this question is as follows:

$$\begin{array}{l} \text{A : B} \\ \text{Old Ratio} = 3 : 2 \\ = \frac{3}{5} : \frac{2}{5} \end{array}$$

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

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

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

New Ratio = Old Ratio – Sacrificing Ratio

$$A = \frac{3}{5} - \frac{2}{7} = \frac{21-10}{35}$$

$$= \frac{11}{35}$$

$$B = \frac{2}{5} - \frac{1}{7} = \frac{14-5}{35}$$

$$= \frac{9}{35}$$

$$\begin{array}{l} \text{A : B : C} \\ \text{New Ratio} = \frac{11}{35} : \frac{9}{35} : \frac{3}{7} \\ = \frac{11:9:15}{35} \\ = 11:9:15 \end{array}$$

8. A, B and C were partners in a firm, sharing profits in 3:3:2 ratio. 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 the new profit-sharing ratio.

The solution to this question is as follows:

$$\begin{array}{l} \text{A : B : C} \\ \text{Old Ratio} = 3 : 3 : 2 \\ = \frac{3}{8} : \frac{3}{8} : \frac{2}{8} \end{array}$$

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

$$A = \frac{3}{8} - \frac{2}{7}$$

$$= \frac{21-16}{56} = \frac{5}{56}$$

$$B = \frac{3}{8} - \frac{1}{7}$$

$$= \frac{21-8}{56} = \frac{13}{56}$$

$$C = \frac{2}{8} - \frac{1}{7}$$

$$= \frac{14-8}{56} = \frac{6}{56}$$

$$\begin{array}{l} \text{A : B : C : D} \\ \text{New Ratio} = \frac{5}{56} : \frac{13}{56} : \frac{6}{56} : \frac{4}{7} \\ = \frac{5:13:6:32}{56} \\ = 5:13:6:32 \end{array}$$

9. Radha and Rukmani are partners in a firm, sharing profits in 3:2 ratio. They admitted Gopi as a new partner. Radha surrendered $\frac{1}{3}$ of her share in favour of Gopi and Rukmani surrendered $\frac{1}{4}$ of her share in favour of Gopi. Calculate the new profit-sharing ratio.

$$\begin{array}{l} \text{Radha : Rukmani} \\ \text{Old Ratio} = \quad 3 \quad : \quad 2 \\ = \quad \frac{3}{5} \quad : \quad \frac{2}{5} \end{array}$$

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

$$\begin{aligned} &= \frac{1}{5} + \frac{1}{10} = \frac{2+1}{10} \\ &= \frac{3}{10} \end{aligned}$$

	Radha	:	Rukmani	:	Gopi
New Ratio	$= \frac{2}{5}$:	$\frac{3}{10}$:	$\frac{3}{10}$
	$= \frac{4}{10}$		$= \frac{3}{10}$		$= \frac{3}{10}$
	$= 4$		$= 3$		$= 3$

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 the new profit-sharing ratio.

The solution to this question is as follows:

	Singh	:	Gupta	:	Khan
Old Ratio =	3	:	2	:	3
	$= \frac{3}{8}$:	$\frac{2}{8}$:	$\frac{3}{8}$

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

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

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

Sacrificing Ratio = Old Ratio \times Surrender Ratio

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

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

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

New Ratio = Old Ratio – Sacrificing Ratio

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

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

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

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

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

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.

The solution to this question is as follows:

$$\begin{aligned}
 & \text{Sandeep : Navdeep} \\
 \text{Old Ratio} &= 5 : 3 \\
 &= \frac{5}{8} : \frac{3}{8}
 \end{aligned}$$

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

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
Sacrificing Ratio =	$\frac{3}{56}$:	$\frac{5}{56}$
	3	:	5

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 the new profit-sharing ratio and sacrificing ratio.

The solution to this question is as follows:

	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 × Proportion of Rao and Swami in the combined share

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

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

$$\begin{array}{l} \text{Rao} \quad : \quad \text{Swami} \quad : \quad \text{C} \\ \text{New Ratio} = \quad \frac{28}{56} \quad : \quad \frac{21}{56} \quad : \quad \frac{1}{8} \end{array}$$

$$\frac{28:21:7}{56}$$

$$4:3:1$$

$$\text{Sacrificing Ratio} = \text{Old Ratio} - \text{New Ratio}$$

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

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

$$\begin{aligned} \text{Sacrificing Ratio} &= \text{Rao} \quad \text{Swami} \\ &= \frac{4}{40} \quad : \quad \frac{1}{40} \\ &= 4:1 \end{aligned}$$

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:

	₹
2013	40,000
2014	50,000

2015	60,000
2016	50,000
2017	60,000

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

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

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

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

14. Capital employed in a business is ₹.2, 00,000. The normal rate of return on capital employed is 15%. During the year 2015, the firm earned a profit of ₹. 48,000. Calculate goodwill on the basis of 3 years' purchase of super profit.

The solution to this question is as follows:

Capital Employed = ₹ 2, 00,000

Actual Profit = 48,000

Normal Rate of Return = 15%

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

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

= ₹ 30,000

Super profit = Actual Profit – Normal Profit

= 48,000 – 30,000

= ₹ 18,000

Goodwill = Super Profit \times Number of Years Purchase

= 18,000 \times 3

= ₹ 54,000

15. The books of Ram and Bharat showed that the capital employed on 31.12.2016 was ₹. 5,00,000 and the profits for the last 5 years: 2015 ₹. 40,000; 2014 ₹. 50,000; 2013 ₹. 55,000; 2012 ₹. 70,000 and 2011 ₹. 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%.

The solution to this question is as follows:

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

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

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

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

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

$$= ₹ 10,000$$

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

$$= 10,000 \times 3$$

$$= ₹ 30,000$$

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

The solution to this question is as follows:

Rajan's Capital	3,00,000
Rajni's Capital	2,00,000
Total Capital Employed	5,00,000

Normal Rate of Return = 20%

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

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

$$= ₹ 7,50,000$$

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

$$= ₹ 7,50,000 - ₹ 5,00,000$$

$$= ₹ 2,50,000$$

Alternative Method

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

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

$$= ₹ 1,00,000$$

Super profit = Actual Profit – Normal Profit

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

$$= ₹ 50,000$$

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

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

$$= ₹ 2,50,000$$

17. A business has earned average profits of ₹. 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 ₹. 10,00,000 and its external liabilities are ₹. 1,80,000. The normal rate of return is 10%.

The solution to this question is as follows:

Capital Employed = Assets – External Liabilities

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

$$= ₹ 8,20,000$$

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

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

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

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

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

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

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

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

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

Alternative Method

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

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

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

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

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

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

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 ₹. 20,000 as capital and ₹. 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.

The solution to this question is as follows:

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

Case (b)	Cash A/c	Dr.		24,000	
	To Ghosh Capital A/c				20,000
	To Premium for Goodwill A/c				4,000
	(Capital and Goodwill brought by Ghosh for (1/5) share of profit)				
	Premium for Goodwill A/c	Dr.		4,000	
	To Verma's Capital A/c				2,500
	To Sharma's Capital A/c				1,500
	(Goodwill brought by Ghosh credited in Old Partner in Sacrificing Ratio)				
	Verma's Capital A/c	Dr.		2,500	
	Sharma's Capital A/c	Dr.		1,500	
	To Cash A/c				4,000
	(Amount of Premium for Goodwill withdrawn by Old Partners)				
Case (c)	Cash A/c	Dr.		24,000	
	To Ghosh's Capital A/c				20,000
	To Premium for Goodwill A/c				4,000
	(Capital and Goodwill brought by Ghosh for (1/5) share of profit)				
	Premium for Goodwill A/c	Dr.		4,000	

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

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 ₹. 30,000 for capital and the requisite amount of goodwill premium in cash. The goodwill of the firm is valued at ₹, 20,000. The new profit-sharing ratio is 2:1:1. A and B withdraw their share of goodwill. Give necessary journal entries.

The solution to this question is as follows:

Journal Entries				
Date	Particulars	L.F.	Debit Amount ₹	Credit Amount ₹
	Cash A/c	Dr.	35,000	

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

Sacrificing Ratio = Old Ratio – New Ratio

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

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

	A		B
Sacrificing Ratio =	$\frac{2}{20}$:	$\frac{3}{20}$
	2	:	3

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

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

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 ₹. 50,000 for his capital and ₹. 10,000 for his 1/4 share of goodwill. Goodwill already appears in the books of Arti and Bharti at

**₹. 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.**

The solution to this question is as follows:

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

To Arti's Capital A/c			4,000
To Bharti's Capital A/c			6,000
(Premium for Goodwill credited Arti's Capital Account)			

	Arti	:	Bharti
Old Ratio	3	:	2

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

	Arti	:	Bharti	:	Sarthi
New Ratio	2	:	1	:	1

Sacrificing Ratio = Old Ratio – New Ratio

$$\text{Arti} = \frac{3}{5} - \frac{2}{4} = \frac{2}{20}$$

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

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

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

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

The solution to this question is as follows:

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

22. Aditya and Balan 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 upon was 2:1:1. Christopher brought ₹. 50,000 for his capital. His share of goodwill was agreed to at ₹. 15,000. Christopher could bring only ₹. 10,000 out of his share of goodwill. Record necessary journal entries in the books of the firm.

Journal Entries						
Date	Particulars			L.F.	Debit Amount ₹	Credit Amount ₹
	Cash A/c		Dr.		60,000	
	To Christopher's Capital A/c					50,000
	To Premium for Goodwill A/c					10,000
	(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 Adiya's Capital A/c					6,000
	To Balam's Capital A/c					9,000
	(Goodwill Christopher's Share taken by Old Partner's in					

Sacrificing Ratio)		

Sacrificing Ratio = Old Ratio – New Ratio

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

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

$$\begin{aligned} \text{Sacrificing Ratio} &= \frac{2}{10} : \frac{3}{20} \\ &= 2 : 3 \end{aligned}$$

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 the goodwill premium in cash. The Goodwill of the firm was valued at ₹. 80,000 on Kanwar's admission. Record necessary journal entries for goodwill on Kanwar's admission.

The solution to this question is as follows:

	Amar	:	Samar
Old Ratio	3	:	1

Kanwar admitted for 1/4 share of profit.

Journal Entries				
Date	Particulars	L.F.	Debit Amount ₹	Credit Amount ₹
	Kanwar's Capital A/c Dr.		20,000	

To Amar's Capital A/c			15,000
To Samar's Capital A/c			5,000
(Kanwar's share of goodwill charged from his capital account by Amar and Kanwar in sacrificing ratio)			

New Firm's Goodwill = ₹ 80,000

Kanwar's Share of Goodwill = $80,000 \times (1/4) = 20,000$

Kanwar's Goodwill will be taken by Amar and Samar in their sacrificing ratio here. Sacrificing Ratio will be equal to the old ratio because the new and sacrificing ratio is not given; if sacrificing and new ratio is not given, it is assumed that the old partners sacrificed in their old ratio.

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 the goodwill of the firm would be valued at 3 years' purchase of the average profits of the last 4 years, which were ₹. 50,000 for 2013, ₹. 60,000 for 2014, ₹. 90,000 for 2015 and

₹. 70,000 for 2016. Ram Lal did not bring his share of the 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 ₹. 2, 02,500.
- b) Goodwill appears in the books at ₹. 2,500.
- c) Goodwill appears in the books at ₹. 2, 05,000.

The solution to this question is as follows:

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

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

Goodwill = Average Profit × No. of Years Purchases = 67,500 × 3 = 2, 02,500

Ram Lal entered into the firm for 1/4 share of the Profit.

Ram Lal's share of goodwill = 2, 02, 500 × (1/4) = ₹ 50,625

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

Mohan Lal will get = Ram Lal's Share of Goodwill × (3/5) = 50,625 × (3/5) = 10,125 × 3 = ₹ 30,375

Sohan Lal will = Ramlal Share of Goodwill × (1/5) = 50,625 × (1/5) = ₹ 10,125 × 2 = ₹ 20,250

Case (a)

Journal Entries

Date	Particulars	L.F.	Debit Amount ₹	Credit Amount ₹
	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 Mohan Lal and Sohan Lal in Sacrificing Ratio)			

Case (b)

Journal Entries

Date	Particulars	L.F.	Debit Amount	Credit Amount ₹

			₹	
Mohan Lal's Capital A/c	Dr.		1,500	
Sohan Lal's Capital A/c	Dr.		1,000	
To Goodwill A/c				2,500
(Goodwill already appeared in the books of the firm written off in the old ratio)				
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 capital by Mohan Lal and Sohan Lal in sacrificing ratio)				

Case (c)

Journal Entries

Date	Particulars	L.F.	Debit Amount ₹	Credit Amount ₹
	Mohan Lal's Capital A/c	Dr.	1,23,000	
	Sohan Lal's Capital A/c	Dr.	82,000	
	To Ram Lal's Capital A/c			2,05,000
	(Goodwill already appeared in the books of firm written off in Old Ratio)			

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 capital by Mohan Lal and Sohan Lal in sacrificing ratio)			

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, the goodwill of the firm is valued at ₹ 36,000. Hari is unable to bring his share of the goodwill premium in cash. Rajesh, Mukesh and Hari decided not to show goodwill on their balance sheet. Record necessary journal entries for the treatment of goodwill on Hari's admission.

The solution to this question is as follows:

Books of Rajesh, Mukesh and Hari				
Journal				
Date	Particulars	L.F.	Amount ₹	Amount ₹
	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 the goodwill.

= Goodwill of firm × admitting Partner Share

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

2) Sacrificing Ratio = Old Ratio – New Ratio

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

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

Sacrificing Ratio between Rajesh and Mukesh 1:3.

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 ₹ 45,000 in cash. It is decided to do adjustments for goodwill without opening a goodwill account. Pass the necessary journal entry for the treatment of goodwill.

The solution to this question is as follows:

Books of Amar, Akbar and Anthony				
Journal				
Date	Particulars	L.F.	Amount ₹	Amount ₹
	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

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 (₹)	Assets	Amount (₹)
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 ₹ 1, 00,000 as his capital and ₹ 60,000 as his share of goodwill for 1/4 share in the profits.

(ii) Plant is to be appreciated to ₹ 1, 20,000 and the value of buildings is to be appreciated by 10%.

(iii) Stock is found overvalued by ₹ 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 ₹ 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.

The solution to this question is as follows:

Books of A, B and C					
Journal					
Date	Particulars	L.F.	Amount ₹	Amount ₹	
2016					
Dec 31	Bank A/c	Dr.	1,60,000		
	To C's Capital A/c			1,00,000	
	To Premium for Goodwill A/c			60,000	
	(Capital and premium for goodwill brought by C for 1/4 th share)				
	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 (Value of assets increased)				35,000
	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
	(Liabilities and Assets 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 ₹	Particulars	Amount ₹		

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 (₹)	Assets		Amount (₹)
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:				Less: Provision for Doubtful Debt	3,000	57,000
	A	2,38,000		Stock		36,000
	B	1,79,000		Plant		1,20,000
	C	1,00,000	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.

28. Leela and Meeta were partners in a firm, sharing profits and losses in a ratio of 5:3. On 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 ₹ 16,000 in general reserve and ₹ 24,000 (Cr) in the 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.

The solution to this question is as follows:

Books of Leela, Meeta and Om					
Journal					
Date	Particulars	L.F.	Amount ₹	Amount ₹	
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)				

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 ₹ 40,000. Record the necessary journal entry for the treatment of the same.

The solution to this question is as follows:

Books of Amit, Viney and Ranjan					
Journal					

Date	Particulars	L.F.	Amount ₹	Amount ₹
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)			

30. A and B share profits in the proportions of 3/4 and 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 (₹)	Assets	Amount (₹)
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 the partnership on the following terms.

- (a) That C pays ₹ 10,000 as his capital.
- (b) That C pays ₹ 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 ₹ 1,000 should be created.
- (f) An item of ₹ 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.

The solution to this question is as follows:

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

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
	(Liabilities and Assets 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 (₹)	Assets		Amount (₹)
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 ₹	Particulars	Amount ₹
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 the ratio between A and B has not changed, hence, the sacrificing ratio should be the same as the old ratio.

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 ₹ 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 Liabilities and Assets, etc., have been worked out at ₹ 50,000 for A and ₹ 12,000 for B. It is agreed that the partner's capital will be according to the 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.

The solution to this question is as follows:

Books of A, B and C

Journal

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

1) Calculation of New Profit sharing Ratio

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

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

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

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

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

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

2) New Capital of A and B.

C bring ₹ 20,000 for 1/4th share of profit in the new firm.

Thus, the total capital of the 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

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

The solution to this question is as follows:

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

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

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

$$\text{Roopa} = \frac{1}{6} - \frac{1}{16} = \frac{8-3}{48} = \frac{5}{48}$$

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

$$\frac{9}{24} : \frac{13}{48} : \frac{5}{48} : \frac{1}{4} = \frac{18}{48} : \frac{13}{48} : \frac{5}{48} : \frac{12}{48} = 18:13:5:12$$

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

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

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

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

$$\text{Seema} = 2,40,000$$

$$\begin{array}{r} \times \\ 1 \\ \hline 4 \end{array} = 60,000$$

Books of Pinky, Qumar, Roopa and Seema

Journal

Date	Particulars	L.F.	Amount ₹	Amount ₹
	Bank A/c	Dr.	60,000	
	To Seema Capital A/c			60,000
	(Seema brings her share of Capital for 1/4 th share of profit)			
	Bank A/c	Dr.	50,000	
	To Pinky's Capital A/c			10,000

	To Kumar's Capital A/c			35,000
	To Roopa's Capital A/c			5,000
(Amount brought by Pinky, Kumar and Roopa to make capital equal to their proportion)				

33. The following was the Balance Sheet of Arun, Bablu and Chetan, sharing profits and losses in the ratio of respectively.

Liabilities			Amount (₹)	Assets	Amount (₹)
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 1/8 on the following terms:

- (a) That Deepak should bring in ₹ 4,200 as goodwill and ₹ 7,000 as his Capital;**
- (b) That furniture be depreciated by 12%;**
- (c) That stock be depreciated by 10%;**
- (d) That a Reserve of 5% be created for doubtful debts;**

(e) That the value of land and buildings having appreciated be brought up to ₹ 31,000;

(f) 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.

The solution to this question is as follows:

Books of Arun, Bablu, Chetan and Deepak					
Profit and Loss Adjustment Account					
(Revaluation Account)					
Dr.			Cr.		
Particulars		Amount ₹	Particulars		Amount ₹
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 ₹		Particulars	Amount ₹	
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 (₹)	Assets	Amount (₹)		
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	11,970	
Chetan 10,500		Cash		9,350	
Deepak 7,000	56,000				
	68,000			68,000	

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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	1,950	1,625	975	
					Bank			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

$$= \frac{42}{112} : \frac{35}{112} : \frac{21}{112} : \frac{1}{8} \text{ or } \frac{42}{112} : \frac{35}{112} : \frac{21}{112} : \frac{14}{112}$$

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

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

Deepak bring ₹ 7,000 for

$\frac{1}{8}$ th share of profit.

Hence total capital of the new firm =

$$7,000 \times \frac{8}{1} = 56,000$$

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

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

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

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 1/4 share in profits. Chintan will bring in ₹ 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

Liabilities			Amount	Assets	Amount
			(₹)		(₹)
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 ₹ 12,000 as his share of the goodwill premium.**
- ii) Buildings were valued at ₹ 45,000 and Machinery at ₹ 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.

Books of Azad, Babli and Chintan

Journal

Date	Particulars	L.F.	Amount	Amount
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			₹	₹
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 1/4 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	Particulars	Amount	
	₹		₹	

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	Assets		Amount
			(₹)			(₹)
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	7,520
	Babli	8,840	12,520	Stock		10,000
Capital Accounts:				Furniture		5,000
	Azad	60,000		Machinery		23,000
	Babli	30,000		Building		45,000
	Chintan	30,000	1,20,000			
			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 ₹ 30,000 for

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

Azad's Capital =

$$1,20,000 \times \frac{2}{4} = 60,000$$

Babli's Capital =

$$1,20,000 \times \frac{1}{4} = 30,000$$

35. Ashish and Dutta were partners in a firm, sharing profits in 3:2 ratio. On Jan. 01, 2015, they admitted Vimal for 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				
Liabilities	Amount ₹	Assets		Amount ₹
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	20,000
		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 ₹ 15,000.**
- ii) The value of the plant be increased by 10,000.**
- iii) Goodwill of the firm be valued at ₹ 20,000.**
- iv) Vimal to bring in capital to the extent of 1/5th 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.

The solution to this question is as follows:

Books of Ashish, Dutta and Vimal					
Journal					
Date	Particulars	L.F.	Amount ₹	Amount ₹	
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 ₹	Assets	Amount ₹
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

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1) Working Note:

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	Particulars	Amount
	₹		₹
Ashish's Capital A/c	2,400		

Dutta's Capital A/c	1,600	Balance c/d	4,000
	4,000		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 the current account because Vimal has not brought his share of goodwill, and he is to bring capital in proportion to the 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	=	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 = $1,80,000 \times \frac{1}{5} = 36,000$.