## 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.**

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 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 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 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 old profit sharing ratio and new profit sharing ratio.

Sacrificing ratio = Old profit sharing ratio - 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 sacrificing ratio is used?**

Sacrificing ratio needs to be used in these occasions:

1. When it is mutually decided by partners of the firm to change 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 existing amount of goodwill?**

Goodwill that exists in the firms before 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 need for the revaluation of Liabilities and Assets on the admission of a partner?**

When a new partner gets admitted in the firm, there is a need to revalue the Liabilities and Assets of the firm for determining 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 old balance sheet may be not 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 needs to be distributed between the existing partners of 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 is this treated in the book of account?**

It is logical to revalue Liabilities and Assets when a new partner gets admitted in the firm, as it is helpful in determining the 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 existing balance sheet may be not 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 needs to be distributed between the existing partners of firm.

Following journal entries are added to the account on the date a new partner is admitted in 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.
To Revaluation A/c
(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 firms 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 trust by meeting all customer demands both in quality and quantity. Having a 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 a greater goodwill.

2. Location: A central location makes it easy to reach and attracts more footfalls which leads to higher sales and more goodwill.

3. Management: Cost efficiency and higher productivity can be achieved by having an 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 continuous supply of fuel, power and raw materials and uses it to produce quality goods enjoys a 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 current period

Following steps are involved in this method

1. Determine 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 total profit determined in the previous step

7. Multiply the average profit hence obtained to 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:

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

$$= 9{,}00{,}000$$

Goodwill = 9, 00,000 × 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 recent year's profit and lower weights marked for 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 Average Profit Method**.** The following formulae is 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 highest weightage to recent year's profit and lowest weightage to past years profits.

2. Multiply weights with the profits corresponding to each year

3. Determine product total

4. Divide the product total with total of weightage to find Weighted Average Profit

5. Multiply the weighted average profit with number of years purchase

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 × 2 = 18,00,000 |
| (6,00,000) | 3 | (6,00,000) × 3 = (18,00,000) |
| 15,00,000 | 4 | 15,00,000 × 4 = 60,00,000 |
| 24,00,000 | 5 | 24,00,000× 5 = 1,20,00,000 |
| **Total** | **15** | **₹ 1,83,00,000** |

$$WeightedAverageProfit = \frac{1,83,00,000}{15} = 1,220,000$$

$$\text{Goodwill} = 1{,}220{,}000 \times 4$$
$$= 4{,}880{,}000$$

**3. Super Profit Method:** In this method, goodwill is determined on 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 as Super Normal Profit

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 number of years purchase to determine goodwill.

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

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

**a) By Average Profit capitalisation**

**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.

Goodwill = Capitalised Average Profit – Actual Capital Employed

**b) By Super Profit capitalisation**.

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:

Super Normal Profit = Average Profit – 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 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.**

When a new partner is admitted to the firm, the capital of all partners must be determined using 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 total capital of firm based on the new partners' capital

2. Divide total capital of the firm by individual share of 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 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 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 share for their new capital.

**2) When new firms' total capital is known:**

When 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. 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 total capital of the new firm by multiplying old capital of existing partners with the reciprocal of old partners 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 total capital calculated which is multiplying new profit ratio with the total capital, individually for all partners. Here is an example to help understand the concept.

Ram and Shyam are partners in a firm sharing profit and loss equally. They agree to admit Anil for 1/3rd 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**

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

$$TotalCapitalofNewFirm = 1,50,000 \times \frac{3}{2} = 2,25,000$$

**3. New Partners Capital**

Ram’s capital = 2, 25,000 × $\frac{3}{1}$ = 75,000

Shyam’s capital = 2, 25, 000 × $\frac{3}{1}$ = 75,000

Anil’s Capital: 2, 25,000 × $\frac{3}{1}$ = 75,000

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

The situation in which a new partner is unable to bring his share of goodwill in cash, the goodwill account gets adjusted through Old Partners account. 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.
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 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 as premium method. There can be two scenarios:

1. New partners pays directly to old partners

2. Partner brings goodwill in form of cash and it is retained in the business.

The corresponding entries are:

(i) When goodwill brought in cash by 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 business:

Premium for Goodwill A/c Dr

To Sacrificing Partners' Capital A/c

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

Revaluation Method: Situations when new partner is unable to bring goodwill in 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, reserves needs to be distributed to current partners (partners of 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 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 in the Balance Sheet of the reconstituted firm. This can be better explained with the help of the below explained example.

Anil & 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 new partner for 1/3rd 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 revaluating 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 at 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 a firm sharing profits and losses in the ratio of 3:2. They admit C into the partnership with 1/6 share in the profits. Calculate the new profit sharing ratio?**

The solution is as follows:

| | 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 × Remaining Share of A and B

$$A = \frac{3}{5} \times \frac{5}{6} = \frac{15}{30}$$

$$B = \frac{2}{5} \times \frac{5}{6} = \frac{10}{30}$$

$$\text{New Ratio} = \overset{A}{\frac{15}{30}} \quad \overset{B}{\frac{10}{30}} : \overset{C}{\frac{1}{6}}$$

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

$$= 15:10:5$$

$$= 3:2:1$$

**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:

$$\text{Old Ratio} = \overset{A:B:C}{3:2:1}$$

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

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 share

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

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

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

New Ratio = Old Ratio × 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 : D

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

**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 new profit sharing ratio?**

The solution is as follows:

| | A: | B |
|---|---|---|
| Old Ratio = | 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

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

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

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

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

$$= 23:13:4$$

**4. A, B and C are partners sharing profits in 2:2:1 ratio admitted D for 1/8 share which he acquired entirely from A. Calculate new profit sharing ratio?**

The solution for this question is as follows:

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

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

$$A = \frac{2}{5} - \frac{1}{8}$$
$$= \frac{16-5}{40}$$
$$= \frac{11}{40}$$

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

**5. P and Q are partners sharing profits in 2:1 ratio. They admitted R into partnership giving him 1/5 share which he acquired from P and Q in 1:2 ratio. Calculate new profit sharing ratio?**

The solution for this question is as follows:

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

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.

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

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

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

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

New Ratio = Old Ratio − Sacrificing Ratio

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

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

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

**6. A, B and C are partners sharing profits in 3:2:2 ratio. They admitted D as a new partner for 1/5 share which he acquired from A, B and C in 2:2:1 ratio respectively. Calculate new profit sharing ratio?**

The solution for this question is as follows:

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

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.

A’s sacrifice = D’s share × $\frac{2}{5}$

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

B’s sacrifice = D’s share × $\frac{2}{5}$

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

C’s sacrifice = D’s share × $\frac{1}{5}$

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

New Ratio = Old Ratio − Sacrificing Ratio

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

$$B = \frac{2}{5} - \frac{1}{7} = \frac{14-5}{35} = \frac{9}{35}$$

$$A = \frac{3}{7} - \frac{2}{25} = \frac{75-14}{175} = \frac{61}{175}$$

$$B = \frac{2}{7} - \frac{2}{25} = \frac{50-14}{175} = \frac{36}{175}$$

$$C = \frac{2}{7} - \frac{1}{25} = \frac{50-7}{175} = \frac{43}{175}$$

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

**7. A and B were partners in a firm sharing profits in 3:2 ratio. They admitted C for 3/7 share which he took 2/7 from A and 1/7 from B. Calculate new profit sharing ratio?**

The solution for this question is as follows:

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

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

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

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

New Ratio = Old Ratio − Sacrificing Ratio

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

**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 4/7 profit. D acquired his share 2/7 from A. 1/7 from B and 1/7 from C. Calculate new profit sharing ratio?**

The solution for this question is as follows:

$$\begin{aligned} & \quad A : B : C \\ \text{Old Ratio} &= 3 : 3 : 2 \\ &= \frac{3}{8} : \frac{2}{8} : \frac{2}{8} \end{aligned}$$

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

$$\begin{aligned} A &= \frac{3}{8} - \frac{2}{7} \\ &= \frac{21-16}{56} = \frac{5}{56} \\ B &= \frac{3}{8} - \frac{1}{7} \\ &= \frac{21-8}{56} = \frac{13}{56} \\ C &= \frac{2}{8} - \frac{1}{7} \\ &= \frac{14-8}{56} = \frac{6}{56} \end{aligned}$$

A : B : C: D

$$\text{New Ratio} = \frac{5}{56} : \frac{13}{56} : \frac{6}{56} : \frac{4}{7}$$

$$= \frac{5:13:6:32}{56}$$

$$= 5:13:6:32$$

**9. Radha and Rukmani are partners in a firm sharing profits in 3:2 ratio. 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?**

Radha : Rukmani

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

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

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 × Surrender Ratio

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

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

New Ratio = Old Ratio − Sacrificing Ratio

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

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 |
|---|---|---|---|---|---|
| New Ratio | $= \frac{2}{5}$ | : | $\frac{3}{10}$ | : | $\frac{3}{10}$ |

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

**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 1/3 of his share in favour of Jain: Gupta surrendered 1/4 of his share in favour of Jain and Khan surrendered 1/5 in favour of Jain. Calculate new profit sharing ratio?**

The solution for 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 × 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

$$\text{Singh's} = \frac{3}{8} - \frac{3}{24} = \frac{9-3}{24} = \frac{6}{24}$$
$$\text{Gupta's} = \frac{2}{8} - \frac{2}{32} = \frac{8-2}{32} = \frac{6}{32}$$
$$\text{Khan's} = \frac{3}{8} - \frac{3}{40} = \frac{15-3}{40} = \frac{12}{40}$$

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

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

**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 for this question is as follows

$$\text{Old Ratio} = \underset{\text{Sandeep}}{5} : \underset{\text{Navdeep}}{3} = \frac{5}{8} : \frac{3}{8}$$

| | Sandeep | : | Navdeep | : | C |
|---|---|---|---|---|---|
| New Ratio = | 4 | : | 2 | : | 1 |
| = | $\frac{4}{7}$ | : | $\frac{2}{7}$ | : | $\frac{1}{7}$ |

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 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?**

The solution for 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

$$\text{Rao} = \frac{7}{8} \times \frac{4}{7} = \frac{28}{56}$$
$$\text{Swami} = \frac{7}{8} \times \frac{3}{7} = \frac{21}{56}$$

| | Rao | : | Swami | : | C |
|---|---|---|---|---|---|
| New Ratio = | $\frac{28}{56}$ | : | $\frac{21}{56}$ | : | $\frac{1}{8}$ |

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

4:3:1

Sacrificing Ratio = Old Ratio − New Ratio

$$\text{Roa} = \frac{3}{5} - \frac{4}{8} = \frac{24-20}{40}$$
$$= \frac{4}{40}$$

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

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

**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**

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 |

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

Goodwill = Average Profit × Number of Year's Purchases = 52,000 × 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 for this question is as follows

Capital Employed = ₹ 2, 00,000

Actual Profit = 48,000

Normal Rate of Return = 15%

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

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

= ₹ 30,000

Super profit = Actual Profit − Normal Profit

= 48,000 − 30,000

= ₹ 18,000

Goodwill = Super Profit × Number of Years Purchase

= 18,000 × 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 for this question is as follows:

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

| 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 |

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

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

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

= ₹ 50,000

Average Super Profit = Average Actual Profit – Normal Profit
= 60,000 – 50,000
= ₹ 10,000

Goodwill = Average Super Profit × Number of year purchase
= 10,000 × 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 for 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%

Capitalised Valued = Actual Profit × $\frac{100}{\text{Normal Rate of Return}}$

= 1,50,000 × $\frac{100}{20}$

= ₹ 7,50,000

Goodwill = Capitalised Value − Capital Employed

= 7,50,000 − 5,00,000

= ₹ 2,50,000

**Alternative Method**

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

= 5,00,000 × $\frac{20}{100}$

= ₹ 1,00,000

Super profit = Actual Profit − Normal Profit

= 1, 50,000 − 1, 00,000

= ₹ 50,000

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

= 50,000 × $\frac{100}{20}$

= ₹ 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 for this question is as follows

Capital Employed = Assets − External Liabilities

= 10, 00,000 − 1, 80,000

= Rs 8, 20,000

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

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

= Rs 82,000

Super Profit = Actual Profit − Normal Profit

= 1, 00,000 − 82,000

= Rs 18,000

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

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

= Rs 1, 80,000

**Alternative Method**

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

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

= Rs 1, 00,000

Goodwill = Capitalised Value − Capital Employed

= 10, 00,000 − 8, 20,000

= 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 for 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 Captial 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 in to 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 for 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

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

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

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

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 for 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 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 1/8 share. Z brought ₹. 20,000 for his capital and ₹. 7,000 for his 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 for 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 is 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 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?**

The solution for this question is as follows

**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

$$\text{Aditya} = \frac{3}{5} - \frac{2}{4} = \frac{12-10}{20} = \frac{2}{20}$$
$$\text{Balam} = \frac{2}{5} - \frac{1}{4} = \frac{8-5}{20} = \frac{3}{20}$$
$$\text{Sacrificing Ratio} = \frac{2}{10} : \frac{3}{20} \frac{2:3}{20}$$
$$= 2:3$$

**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 ₹. 80,000 on Kanwar's admission. Record necessary journal entry for goodwill on Kanwar's admission.**

The solution for 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 × (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 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.

**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 ₹. 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 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 for 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 |

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 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 old ratio because 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 Distrbuted between in 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 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) | | | | |

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 goodwill of the firm is valued at ₹ 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.**

The solution for 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 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 adjustment for goodwill without opening goodwill account. Pass the necessary journal entry for the treatment of goodwill?**

The solution for 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 Expenses | | 2,000 | Sundry Debtors | 60,000 |
| | | | 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 over valued 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 for 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 | | | | 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 |
| | (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 the ratio of 5:3. On Is 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 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 for 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 necessary journal entry for the treatment of the same.**

The solution for 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 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 for 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<br>To A's Capital A/c<br>To B's Capital A/c<br>(Amount of goodwill brought by C is transferred to old partners' capital account in their sacrificing ratio, 3:1) | | 5,000 | <br>3,750<br>1,250 |
| Jan. 01 | A's Capital A/c Dr.<br>B's Capital A/c Dr.<br>To Bank A/c<br>(Half of amount withdrawn by old partners) | | 1,875<br>625 | <br><br>2,500 |
| Jan. 01 | Revaluation A/c Dr.<br>To Stock A/c<br>To Fixture A/c<br>To Provision for doubtful Debts on Debtors A/c<br>To provision for doubtful Debts on Bills Receivable A/c<br>To Claim for Damages A/c<br>(Liabilities and Assets are revalued) | | 4,050 | <br>2,000<br>100<br>800<br>150<br>1,000 |
| Jan. 01 | Land and Building A/c Dr.<br>Sundry Creditors A/c<br>To Revaluation A/c<br>(Asset and liability are revalued) | | 5,000<br>650 | <br><br>5,650 |
| Jan. 01 | Revaluation A/c Dr.<br>To A's Capital A/c<br>To B's Capital A/c<br>(Profit on Revaluation transferred to old partners' capital) | | 1,600 | <br>1,200<br>400 |
| Jan. 01 | Reserve Fund A/c Dr.<br>To A's Capital A/c<br>To B's Capital A/c<br>(Reserve Fund distributed among old partners) | | 4,000 | <br>3,000<br>1,000 |

**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 ratio between A and B has not change hence sacrificing ratio should be same as 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. has been worked out at ₹ 50,000 for A and ₹ 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?**

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

$$\text{A's Capital} = \frac{9}{16} \times 80,000 = 45,000$$
$$\text{Thus, A will withdraw} = 50,000 - 45,000 = 5,000$$
$$\text{B's Capital} = \frac{3}{16} \times 80,000 = 15,000$$

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

32. **Pinky, Qumar and Roopa 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, whichs he gets 1/8 from Pinky, and 1/16 each from Qmar 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 of 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 doing adjustments in respect of capitals according to the agreement between the partners?**

The solution for 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

Pinky = 90,000 − 80,000 = 10,000

Qumar = 65,000 − 30,000 = 35,000

Roopa = 25,000 − 20,000 = 5,000

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

**Books of Pinky, Qumar, Roopa and Seema**

**Journal**

| Date | Particularss | | L.F. | Amount ₹ | Amount ₹ |
|---|---|---|---|---|---|
| | Bank A/c | Dr. | | 60,000 | |
| | To Seema Capital A/c | | | | 60,000 |
| | (Seema bring 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 Qumar's Capital A/c | | | | 35,000 |
| | To Roopa's Capital A/c | | | | 5,000 |
| | (Amount brought by Pinky, Qumar 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 $\frac{6}{14}:\frac{5}{14}:\frac{3}{14}$ 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 for this question is as follows

**Books of Arun, Bablu, Chetan and Deepak**

**Profit and Loss Adjustment Account**

**(Revaluation Account)**

| Dr. Particulars | | Amount ₹ | Particulars | Amount ₹ Cr. |
|---|---|---|---|---|
| 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. Particulars | Amount ₹ | Cr. 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 |

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 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 | | Funiture | 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 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 ₹ |
|---|---|---|---|---|---|
| 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<br>(General reserve distributed between old partners) | | | 2,000 |
| | Building A/c Dr.<br>To Revaluation A/c<br>(Increase in value of Building adjusted) | | 5,000 | 5,000 |
| | Revaluation A/c Dr.<br>To Machinery A/c<br>To Provision for Doubtful Debt<br>(Decrease in value of machinery adjusted and Provision for Doubtful Debt created) | | 2,480 | 2,000<br>480 |
| | Revaluation A/c Dr.<br>To Azad is Capital A/c<br>To Babli's Capital A/c<br>(Profit on revaluation transferred to Azad and Babli's Capital Account) | | 2,520 | 1,680<br>840 |
| | Azad's Capital A/c Dr.<br>To Azad's Current A/c<br>(Excess of Capital transferred to current account) | | 3,680 | 3,680 |
| | Babli's Capital A/c Dr.<br>To Babli's Current A/c<br>(Excess of Capital transferred to current account) | | 8,840 | 8,840 |

**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 $\frac{1}{4}$ share of profit. Hence total capital of a firm = 30,000× $\frac{4}{1}$ =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 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 for 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 | 20,000 |
| 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 |

**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

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

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 | = | 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 × $\frac{5}{4}$ =1, 80,000

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