Chapter 3 – Change in Profit-Sharing Ratio Among the Existing Partners

Question 1.
A and B are sharing profits and losses equally. With effect from 1st April, 2016, they agree to share profits in the ratio of 4:3. Calculate individual partner's gain or sacrifice due to change in ratio.
Solution:

Old Ratio (A and B)=1:1
New Ratio (A and B)=4:3
Sacrificing (or Gaining) Ratio=Old Ratio-New Ratio

$$\text{A's Share}=\frac{1}{2}-\frac{4}{7}=\frac{7-8}{14}=\frac{-1}{14}(\text{Gain})$$

$$\text{B's Share}=\frac{1}{2}-\frac{3}{7}=\frac{7-6}{14}=\frac{1}{14}(\text{Sacrifice})$$

∴ A's Gain=1/14
B's Sacrifice= 1/14

Question 2.
X, Y and Z are sharing profits and losses in the ratio of 5:3:2. With effect from 1st April, 2016, they e future profits and losses in the ratio of 5:2:3. Calculate each partner's gain or sacrifice due to the change in ratio.
Solution:

OldRatio(X, Y and Z)=5 : 3 : 2
NewRatio(X, Y and Z)=5 : 2 : 3
Sacrificing(or Gaining)Ratio=Old Ratio − NewRatio

$$\text{X's Share}=\frac{5}{5}-\frac{5}{10}=\text{Nil}$$

$$\text{Y's Share}=\frac{3}{10}-\frac{2}{10}=\frac{1}{10}(\text{Sacrifice})$$

$$\text{Z's Share}=\frac{2}{10}-\frac{3}{10}=-\frac{1}{10}(\text{Gain})$$

∴ Z's Gain = 1 / 10
Y's Sacrifice = 1 / 10

Question 3.

X, Y and Z are sharing profits and losses in the ratio of 5:3:2. With effect from 1st April, 2016, they decide to share future profits and losses equally. Calculate each partners gain or sacrifice due to the change in ratio.
Solution:

OldRatio(X, Y and Z)=5 : 3 : 2
NewRatio(X, Y and Z)=1 : 1 : 1
Sacrificing(or Gaining)Ratio=Old Ratio − NewRatio

$$\text{X's Share}=\frac{5}{10}-\frac{1}{3}=\frac{15-10}{30}=\frac{5}{30}(\text{Sacrifice})$$

$$\text{Y's Share}=\frac{3}{10}-\frac{1}{3}=\frac{9-10}{30}=\frac{-1}{30}(\text{Gain})$$

$$\text{Z's Share}=\frac{2}{10}-\frac{1}{3}=\frac{6-10}{30}=\frac{-4}{30}(\text{Gain})$$

∴ Y's Gain = 1 / 30
Z's Gain = 4 / 30
X's Sacrifice = 5 / 30

Question 4.

A, B and C shared profit and losses in the ratio of 3:2:1 respectively. With effect from 1st April, 2016, they agreed to share profit equally. The goodwill of the firm was valued at Rs.18,000. Pass necessary journal entry.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	C's Capital A/c Dr. To A's capital A/c (Being adjustment of goodwill made on change in profit sharing ratio)		3,000	3,000

Working Note:

Old Ratio (A,B and C)= 3:2:1

New Ratio (A,B and C)=1:1:1

Sacrificing (or Gaining) Ratio = Old Ratio - New Ratio

$$A's\ Share = \frac{3}{6} - \frac{1}{3} = \frac{3-2}{6} = \frac{1}{6} (Sacrifice)$$

$$B's\ Share = \frac{2}{6} - \frac{1}{3} = \frac{2-2}{6} = Nil$$

$$C's\ Share = \frac{1}{6} - \frac{1}{3} = \frac{1-2}{6} = \frac{-1}{6} = (Gain)$$

Goodwill of the firm = ₹18, 000

$$A\ will\ receive\ for\ goodwill = 18,000 \times \frac{1}{6} = ₹3,000$$

$$C\ will\ give\ for\ goodwill = 18,000 \times \frac{1}{6} = ₹3,000$$

Question 5.

X, Y and Z are partners sharing profits and losses in the ratio of 5:3:2. From 1st April, 2016, they decided to share profits and losses equally. The Partnership Deed provides that in the event of any change in the profit-sharing ratio, the goodwill should be valued at two years' purchase of the average profit of the preceding five years. The profits and losses of the preceding years are:

Year	2011-12	2012-13	2013-14	2014-15	2015-16
Profit (₹)	70,000	85,000	45,000	35,000	10,000 (Loss)

It is the practice of the firm not to show goodwill in the books.

You are required to calculate goodwill and pass Journal entry.

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	Y's Capital A/c	Dr.		3,000	
	Z's Capital A/c			12,000	15,000
	To X's Capital A/c				
	(Being amount of goodwill adjusted on change in profit sharing ratio)				

Working Notes:

1 Calculation of Sacrificing (or Gaining) Ratio
Old Ratio (X,Y and Z) = 5:3:2
New Ratio (X,Y and Z) = 1:1:1
Sacrificing (or Gaining) Ratio = Old Ratio - New Ratio

$$X's\,Share = \frac{5}{10} - \frac{1}{3} = \frac{15-10}{30} = \frac{5}{30}(\text{Sacrifice})$$

$$Y's\,Share = \frac{3}{10} - \frac{1}{3} = \frac{9-10}{30} = \frac{-1}{30}(\text{Gain})$$

$$Z's\,Share = \frac{2}{10} - \frac{1}{3} = \frac{6-10}{30} = \frac{-4}{30}(\text{Gain})$$

2 Calculation of Goodwill

$$\text{Goodwill} = \text{Average Profit} \times \text{No. of Year's Purchased}$$

$$\text{Average Profit} = \frac{70,000 + 85,000 + 45,000 + 35,000 - 10,000}{5} = ₹45,000$$

$$\therefore \text{Goodwill} = 45,000 \times 2$$
$$= ₹90,000$$

3 Adjustment of Goodwill

$$\text{Amount to be credited to X's Capital A/c} = 90,000 \times \frac{5}{30}(\text{Share of sacrifice})$$
$$= ₹15,000$$

$$\text{Amount to be debited to Y's Capital A/c} = 90,000 \times \frac{1}{30}(\text{Share of gain})$$
$$= ₹3,000$$

$$\text{Amount to be debited to Z's Capital A/c} = 90,000 \times \frac{4}{30}(\text{Share of gain})$$
$$= ₹12,000$$

Question 6.

X, Y and Z are partners sharing profits and losses in the ratio of 5:3:2, decided to share future profits and losses equally with effect from 1st April, 2016. On that date, the goodwill appeared in the books at Rs.12,000. But it was revealed at Rs.30,000. Pass Journal entries assuming that no goodwill will appear the books of accounts.

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	X's Capital A/c	Dr.		6,000	
	Y's Capital A/c	Dr.		3,600	
	Z's Capital A/c	Dr.		2,400	
	To Goodwill A/c				12,000
	(Being goodwill written off)				
	Y's Capital A/c	Dr.		1,000	
	Z's Capital A/c	Dr.		4,000	
	To X's Capital A/c				5,000
	(Being amount of goodwill adjusted on change in profit sharing ratio)				

Working Notes:

1 Calculation of Sacrificing (or Gaining) Ratio

Old Ratio (X, Y and Z)=5:3:2

New Raito (X,Y and Z)= 1:1:1

Sacrificing (or Gaining) Ratio = Old Ratio- New Ratio

$$X's\ Share = \frac{5}{10} - \frac{1}{3} = \frac{15-10}{30} = \frac{5}{30}(\text{Sacrifice})$$

$$Y's\ Share = \frac{3}{10} - \frac{1}{3} = \frac{9-10}{30} = \frac{-1}{30}(\text{Gain})$$

$$Z's\ Share = \frac{2}{10} - \frac{1}{3} = \frac{6-10}{30} = \frac{-4}{30}(\text{Gain})$$

2 Writing off of Old Goodwill

$$X's\ Share = 12,000 \times \frac{5}{10} = ₹6,000$$

$$Y's\ Share = 12,000 \times \frac{3}{10} = ₹3,600$$

$$Z's\ Share = 12,000 \times \frac{2}{10} = ₹2,400$$

3 Adjustment of Goodwill

$$\text{Amount to be credited to X's Capital A/c} = 30,000 \times \frac{5}{30}(\text{Share of sacrifice}) = ₹5,000$$

$$\text{Amount to be debited to Y's Capital A/c} = 30,000 \times \frac{1}{30}(\text{Share of gain}) = ₹1,000$$

$$\text{Amount to be debited to Z's Capital A/c} = 30,000 \times \frac{4}{30}(\text{Share of gain}) = ₹4,000$$

Question 7.

A and B are partners in a firm sharing profits in the ratio of 2: 1. They decided with effect from 1st April, 2016, that they would share profits in the ratio of 3:2. But, this decision was taken after the profit for the year 2016-17 amounted to Rs.90,000 has been distributed in the old ratio.

Value of firm’s goodwill was estimated on the basis of aggregate of two years’ profits preceding the date decision became effective.

The profits for 2014-15 and 2015-16 were Rs.60,000 and Rs.75,000 respectively. It was decided that Goodwill Account will be opened in the books of the firm and necessary adjustment be made through Capital Accounts which, on 31st March stood, at Rs.1,50,000 for A and Rs.90,000 for B.

Pass necessary Journal entries and prepare Capital Accounts.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	A's Capital A/c Dr.		6,000	
	To B's Capital A/c			6,000
	(Being adjustment of profit for 2016-17 on change in profit sharing ratio)			
	B's Capital A/c Dr.		9,000	
	To A's Capital A/c			9,000
	(Being adjustment of goodwill made on change in profit sharing ratio)			

Partner's Capital Accounts

Dr **Cr**

Particulars	A	B	Particulars	A	B
To B's Capital A/c	6,000	-	By Balance b/d	1,50,000	90,000
(Adjustment of profit)			By A's Capital A/c		6,000
To A's Capital A/c		9,000	(Adjustment Profit)		
(Adjustment of Goodwill)			By B's Capital A/c	9,000	-
To Balance c/d	1,53,000	87,000	(Adjustment of Goodwill)		
	1,53,000	96,000		1,59,000	96,000

Working Notes:

1 Calculation of Sacrificing (or Gaining) Ratio

Old Ratio (A and B)=2:1

New Ratio (A and B)=3:2

Sacrificing (or Gaining) Ratio=Old Ratio-New Ratio

$$\text{A's Ratio} = \frac{2}{3} - \frac{3}{5} = \frac{10-9}{15} = \frac{1}{15}\text{(Sacrifice)}$$

$$\text{B's Ratio} = \frac{1}{3} - \frac{2}{5} = \frac{5-9}{15} = \frac{-1}{15}\text{(Gain)}$$

2 Adjustment of Profit for 2016-17

$$\text{Profit to be debited to A's Capital A/c} = 90{,}000 \times \frac{1}{15}\text{(Share of sacrifice)}$$

$$= ₹\,6{,}000$$

$$\text{Profit to be credited to B's Capital A/c} = 90{,}000 \times \frac{1}{15}\text{(Share of gain)}$$

$$= ₹\,6{,}000$$

3 Calculation of New Goodwill

= Profit of 2014-15+ Profit of 2015-16

= 60,000+75,000

= ₹1,35,000

4 Adjustment of Goodwill

$$\text{Goodwill to be debited to A's Capital A/c} = 1{,}35{,}000 \times \frac{1}{15}\text{(Share of sacrifice)}$$

$$= ₹\,9{,}000$$

$$\text{Goodwill to be debited to B's Capital A/c} = 1{,}35{,}000 \times \frac{1}{15}\text{(Share of gain)}$$

$$= ₹\,9{,}000$$

Question 8.

X and Y are partners in a firm sharing profits and losses in the ratio of 3:2. With effect from 1st April, 2016, they decided to share future profits equally. On the date of change in the profit-sharing ratio, the Profit and Loss Account showed a credit balance of Rs.1,50,000. Record the necessary Journal entry for the distribution of the balance in the Profit and Loss Account immediately before the change in the profit-sharing ratio.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and Loss A/c Dr.		1,50,000	
	To X's Capital A/c			90,000
	To Y's Capital A/c			60,000
	(Being adjustment of balance in PandL A/c in old ratio)			

Working Notes:
1 Calculation of Share of Profit and Loss A/c

$$X's\ share = 1,50,000 \times \frac{3}{5} = ₹90,000$$

$$Y's\ share = 1,50,000 \times \frac{2}{5} = ₹60,000$$

Question 9.

X and Yare partners sharing profits in the ratio of 2:1. On 31st March, 2016, their Balance Sheet shot General Reserve of Rs.60,000. It was decided that in future they will share profits and losses in the ratio of 3:2. Pass necessary Journal entry in each of the following alternative cases:

(i) If they do not want to show General Reserve in the new Balance Sheet.

(ii) If they want to show General Reserve in the new Balance Sheet.

Solution:

(i) If they do not want to show General Reserve in the new Balance Sheet

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	General Reserve A/c Dr.		60,000	
	To X's Capital A/c			40,000
	To Y's Capital A/c			20,000
	(Being adjustment of general reserve A/c in old ratio)			

WN1 Calculation of Share of General Reserve

$$X's\ share = 60,000 \times \frac{2}{3} = ₹40,000$$

$$Y's\ share = 60,000 \times \frac{1}{3} = ₹20,000$$

(ii) If they want to show General Reserve in the new Balance Sheet

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Y's Capital A/c Dr.		4,000	
	To X's Capital A/c			4,000
	(Being adjustment of balance in General Reserve A/c in sacrificing/gaining ratio)			

Working Notes:
1 Calculation of Gain/Sacrifice
Sacrificing Ratio = Old Ratio-New Ratio

$$X = \frac{2}{3} - \frac{3}{5} = \frac{1}{15}(\text{sacrifice})$$

$$Y = \frac{1}{3} - \frac{2}{5} = \frac{1}{15}(\text{gain})$$

2 Calculation of Compensation by Y to X

$$\text{Amount to be compensated} = 60,000 \times \frac{1}{15} = 4,000$$

Question 10.

X and Y are in partnership sharing profits in the ratio of 2: 3. With effect from 1st April, 2016 they agreed to share profits in the ratio of 1: 2. For this purpose, the goodwill of the firm to be valued at two years' purchase of the average profit of last three years, which were Rs.1,50,000; Rs.1,60,000 and Rs.2,00,000 respectively. The reserves appear in the book Rs.1,10,000. Partners neither want to show the goodwill in the books nor want to distribute reserves. You are required to give effect to the change by passing a single Journal entry

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Y's Capital A/c Dr.		30,000	
	To X's Capital A/c			30,000
	(Being adjustment mode for goodwill and General Reserve)			

Working Notes:

1 Calculation of Goodwill

Goodwill=Average Profit × Number of year's purchase

$$\text{Average Profit} = \frac{1,50,000 + 1,60,000 + 2,00,000}{3} = ₹\,1,70,000 \therefore \text{Goodwill} = 1,70,000 \times 2 = ₹\,3,40,000$$

2 Calculation of Sacrificing (or Gaining) Ratio

Old Ratio (X and Y) =2:3

New Ratio (X and Y) = 1:2

Sacrificing (or Gaining) Ratio = Old Ratio-New Ratio

$$\text{X's ratio} = \frac{2}{5} - \frac{1}{3} = \frac{6-5}{15} = \frac{1}{15}(\text{Sacrifice})$$

$$\text{Y's ratio} = \frac{3}{5} - \frac{2}{3} = \frac{9-10}{15} = \frac{-1}{15}(\text{Gain})$$

3 Adjustment of Goodwill

$$\text{Amount to be credited to X's Capital} = 3,40,000 \times \frac{1}{15} = ₹\,22,667$$

$$\text{Amount to be credited to Y's Capital} = 3,40,000 \times \frac{1}{15} = ₹\,22,667$$

4 Adjustment of General Reserve

$$\text{Amount to be credited to X's Capital} = 1,10,000 \times \frac{1}{15} = ₹7,333$$

$$\text{Amount to be credited to Y's Capital} = 1,10,000 \times \frac{1}{15} = ₹7,333$$

5 Net Adjustment of Goodwill and General Reserve

Particulars	X	Y
Adjustment of Goodwill	22,667(Cr.)	22,667(Dr.)
Adjustment of General Reserve	7,333(Cr.)	7,333(Dr.)
Net Amount	30,000(Cr.)	30,000(Dr)

Question 11.

X, Y and Z are sharing profits and losses in the ratio of 5:3:2. They decide to share future profits and losses in the ratio of 2:3:5 with effect from 1st April, 2016. They also decide to record the effect of the following accumulated profits, losses and reserves without affecting their book figures by passing a single entry.

	Book Figure (₹)
General Reserve	6,000
Profit and Loss A/c (Credit)	24,000
Advertisement Suspense A/c	12,000

Pass necessary Single Adjustment Entry.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Z's Capital A/c Dr.		5,400	
	To X's Capital A/c			5,400
	(Being adjustment for general reserve, Profit and Loss A/c and advertisement suspense account is made on change in profit sharing ratio)			

Working Notes :

1 Net Amount to be adjustment
= General Reserve + Profit and Loss A/c(Credit) - Advertisement Suspense A/c
= 6,000+24,000-12,000
= ₹18,000

2 Calculation of Sacrificing (or Gaining) Ratio
Old Ratio (X,Y and Z)=5:3:2
New Ratio (X,Y and Z) = 2:3:5
Sacrificing (or Gaining) Ratio= Old Ratio-New Ratio

$$X's\ Share = \frac{5}{10} - \frac{2}{10} - \frac{3}{10}(\text{Sacrifice})$$

$$Y's\ Share = \frac{3}{10} - \frac{3}{10} = \text{Nil}$$

$$Z's\ Share = \frac{2}{10} - \frac{5}{10} = \frac{-3}{10}(\text{Gain})$$

$$\text{Amount to be credited to X's Capital} = 18,000 \times \frac{3}{10} = ₹5,400$$

$$\text{Amount to be debited to Z's Capital} = 18,000 \times \frac{3}{10} = ₹5,400$$

Question 12.

X, Y and Z who are presently sharing profits and losses in the ratio of 5:3:2 decide to share future profits and losses in the ratio of 2:3:5. Give the Journal entry to distribute 'Workmen Compensation Reserve of 1,20,000 at the time of change in profit-sharing ratio, when there is no claim against it.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Workmen Compensation Reserve A/c Dr.		1,20,000	
	To X's Capital A/s			60,000
	To Y's Capital A/c			36,000
	To Z's Capital A/c			24,000
	(Being adjustment of balance in Workmen Compensation Reserve A/c in old ratio)			

Working Notes:

1 Calculation of Share of Workmen Compensation Reserve

$$X's\ share = 1,20,000 \times \frac{5}{10} = 60,000$$

$$Y's\ share = 1,20,000 \times \frac{3}{10} = 36,000$$

$$Z's\ share = 1,20,000 \times \frac{2}{10} = 24,000$$

Question 13.

X, Y and Z who are presently sharing profits and losses in the ratio of 5: 3: 2 decide to share future profits and losses in the ratio of 2:3:5. Give the Journal entry to distribute 'Workmen Compensation Reserve' of Rs.1,20,000 at the time of change in profit-sharing ratio, when there is a claim of Rs.80,000 against it.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Workmen Compensation Reserve A/c Dr.		80,000	
	To Provision for Workmen Compensation Reserve A/c			80,000
	(Being adjustment for claim against WCR)			
	Workmen Compensation Reserve A/c		40,000	
	To X's Capital A/c			20,000
	To Y's Capital A/c			12,000
	To Z's Capital A/c			8,000
	(Being adjustment of balance in workmen composition reserve A/c in old ratio)			

Working Notes:
1 Calculation of Share of Workmen Compensation Reserve

$$\text{X's share} = 40,000 \times \frac{5}{10} = ₹20,000$$

$$\text{Y's share} = 40,000 \times \frac{3}{10} = ₹12,000$$

$$\text{Z's share} = 40,000 \times \frac{2}{10} = ₹8,000$$

Question 14.

A, B and C who are presently sharing profits and losses in the ratio of 5:3:2 decide to share future profits and losses in the ratio of 2:3:5. Give the Journal entry to distribute 'Investment Fluctuation Reserve' of Rs.20,000 at the time of change in profit-sharing ratio, when investment (market value Rs.95,000) appears at Rs.1, 00,000.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Investment Fluctuation Reserve A/c Dr.		5,000	
	To Investment A/c			5,000
	(Being adjustment for decrease in the value of investments)			
	Investment Fluctuation Reserve A/c Dr.		15,000	
	To A's Capital A/c			7,000
	To B's Capital A/c			4,500
	To C's Capital A/c			3,000
	(Being adjustment of balance in Investment Fluctuation Reserve A/c in old ratio)			

Working Notes:
1 Calculation of Share of Investment Fluctuation Reserve

$$\text{A's share} = 15,000 \times \frac{5}{10} = ₹7,500$$

$$\text{B's share} = 15,000 \times \frac{3}{10} = ₹4,500$$

$$\text{C's share} = 15,000 \times \frac{2}{10} = ₹3,000$$

Question 15.

X, Y and Z share profits as 5:3:2. They decide to share their future profits as 4:3:3 with effect from 1st April, 2016. On this date the following revaluations have taken place.

	Book Value (₹)	Revised Value (₹)
Investments	22,000	25,000
Plant and Machinery	25,000	20,000
Land and Building	40,000	50,000
Outstanding Expenses	5,600	6,000
Sundry Debtors	60,000	50,000
Trade Creditors	70,000	60,000

Pass necessary adjustment entry to be made because of the above changes in the values of assets and liabilities. However, old values will continue in the books.

Solution:

Journal

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Z's Capital A/c ... Dr. To X's Capital A/c (Being adjustment of revaluation profit made)		760	760

Working Notes:

1 Calculation of Net Profit or Loss on Revaluation

Particulars	(₹)
Increase in Investment	3,000(Cr.)
Decrease in Plant and Machinery	(5,000)(Dr.)
Increase in Land and Building	10,000(Cr.)
Increase in Outstanding Expenses	(400)(Dr.)
Decrease in Sundry Debtors	(10,000)(Dr.)
Decrease in Trade Creditors	10,000(Cr.)
Profit on Revaluation	7,600(Cr.)

2 Calculation of Sacrificing (or Gaining) Ratio.
Old Ratio (X,Y and Z)= 5:3:2
New Ratio (X,Y and Z)=4:3:3
Sacrificing (or Gaining) Ratio = Old Ratio- New Ratio

$$X\text{'s share} = \frac{5}{10} - \frac{4}{10} = \frac{1}{10}\text{(Sacrifice)}$$

$$Y\text{'s share} = \frac{3}{10} - \frac{3}{10} = \text{Nil}$$

$$Z\text{'s share} = \frac{2}{10} - \frac{3}{10} = \frac{-1}{10}\text{(Gain)}$$

3 Adjustment of Revaluation Profit

$$X \text{ will be credited by } = 7{,}600 \times \frac{1}{10} = ₹760$$

$$Z \text{ will be debited by } = 7{,}600 \times \frac{1}{10} = ₹\ 760$$

Question 16.

X, Y and Z are partners sharing Profits and Losses in the ratio of 7:5:4. Their Balance Sheet as at 31st March,2016 stood as:

Liabilities		₹	Assets	₹
Capital A/cs:			Sundry Assets	7,00,000
X	2,10,000			
Y	1,50,000			
Z	1,20,000	4,80,000		
General Reserve		65,000		
Profit and Loss A/c		25,000		
Creditors		1,30,000		
		7,00,000		7,00,000

Partners decided that with effect from 1st April, 2016, they will share profits and Losses in the ratio of 3:2:1. For this purpose, goodwill of the firm was valued at ₹1,50,000. The partners neither want to record the goodwill nor want to distribute the General Reserve and profits.
Pass a Journal entry to record the change and prepare revised Balance Sheet.

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	X's Capital A/c	Dr.		15,000	
	Y's Capital A/c	Dr.		5,000	
	To Z's Capital A/c				20,000
	(Being adjustment made for Goodwill, General Reserve and Profit and Loss Account on change in profit sharing ratio)				

Balance Sheet (after change in Profit Sharing Ratio)

Liabilities		₹	Assets	₹
Capital A/cs:			Sundry Assets	7,00,000
X	2,10,000			
Y	1,50,000			
Z	1,20,000	4,80,000		
General Reserve		65,000		
Profit and Loss A/c		25,000		
Creditors		1,30,000		
		7,00,000		7,00,000

Working Notes:
1 calculation of Sacrificing (or Gaining) Ratio
Old Ratio (X,Y and Z)=7:5:4
New Ratio (X,Y and Z)= 3:2:1
Sacrificing (or Gaining) Ratio= Old Ratio- New Ratio

$$\text{X's Share}= \frac{5}{16}-\frac{2}{6}=\frac{21-24}{48}=\frac{-3}{48}\text{(Gain)}$$

$$\text{Y's Share}= \frac{5}{16}-\frac{2}{6}=\frac{15-16}{48}=\frac{-1}{48}\text{(Gain)}$$

$$\text{Z's Share}= \frac{4}{16}-\frac{1}{6}=\frac{12-8}{48}=\frac{4}{48}\text{(Sacrifice)}$$

2 Adjustment of General Reserve, Profit and Loss Account and Goodwill
Total Amount for Adjustment= General Reserve+ profit and Loss Account + Goodwill
= 65,000+25,000+1,50,000=Rs.2,40,000

$$\text{Amount to be debited to X,s Capital} = 2{,}40{,}000 \times \frac{3}{48}(\text{share of gain})$$
$$= \text{Rs. } 15{,}000$$

$$\text{Amount to be debited to Y's Capital} = 2{,}40{,}000 \times \frac{1}{48}(\text{share of gain})$$
$$= \text{Rs. } 5{,}000$$

$$\text{Amount to be credited to Z's Capital} = 2{,}40{,}000 \times \frac{4}{48}(\text{share of sacrifice})$$
$$= \text{Rs.}20{,}000$$

3

Partner's Capital Accounts

Dr. Cr

Particulars	X	Y	Z	Particulars	X	Y	Z
To Z's Capital A/c	15,000	5,000	-	By Balance B/d	2,10,000	1,50,000	1,20,000
				By X's Capital A/c			15,000
				By Y's Capital A/c			5,000
To Balance c/d	1,95,000	1,45,000	1,40,000				
	2,10,000	1,50,000	1,40,000		2,10,000	1,50,000	1,40,000

Question 17.

A and B are partners sharing profits in the ratio of 4:3. Their Balance Sheet as at March,2016 stood as:

Liabilities		₹	Assets	₹
Sundry Creditors		28,000	Cash	20,000
Reserve		42,000	Sundry Debtors	1,20,000
Capital A/cs:			Stock	1,40,000
A	2,40,000		Fixed Assets	1,50,000
B	1,20,000	3,60,000		
		4,30,000		4,30,000

They decided that with effect from 1st April, 2016, they will share profits and losses in the ratio 2:1. For this purpose they decided that:

i. Fixed Assets are to be depreciated by 10%
ii. A Provision of 6% be made on Sundry
iii. Stock be valued at ₹1,90,000. Debtors for Doubtful Debts.
iv. An amount of ₹3,700 included in Creditors is not likely to be claimed.

Partners decided to record the revised values in the books. However, they do not want to disturb the Reserves. You are required to pass Journal entries, prepare Capital Accounts of Partners and the revised Balance Sheet.

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	A's Capital A/c	Dr.		4,000	
	To B's Capital A/c	Dr.			4,000
	(Being adjustment of General Reserve on change in profit sharing ratio)				

Partner's Capital Accounts

Dr. **Cr.**

Particulars	A	B	Particulars	A	B
To B's Capital A/c	4,000	-	By Balance B/d	2,40,000	1,20,000
(Adjustment of General Reserve)			By Revaluation (Profit)	18,000	13,500
			By A's Capital A/c	-	4,000
To Balance c/d	2,54,000	1,37,500	(Adjustment of General Reserve)		
	2,58,000	1,37,500		2,58,000	1,37,500

Balance Sheet

Liabilities		₹	Assets		₹
Sundry Creditors(28,000-3,700)		24,300	Cash		20,000
General Reserve		42,000	Sundry Debtors	1,20,000	
Capital Accounts			Less: Provision for Doubtful Debts	(7,200)	1,12,800
A	2,54,000		Stock		1,90,000
B	1,37,000		Fixed Assets(1,50,000-15,000)		1,35,000
		3,91,500			
		4,57,800			4,57,800

Working Notes:

1 Calculation of Sacrificing (or Gaining) Ratio

Old Ratio (A and B)= 4:3

New Ratio (A and B)= 2:1

Sacrificing (or Gaining) Ratio = Old Ratio- New Ratio

$$\text{A's Share} = \frac{4}{7} - \frac{2}{3} = \frac{12-14}{21} = \frac{-2}{21}(\text{Gain})$$

$$\text{B's Share} = \frac{3}{7} - \frac{1}{3} = \frac{9-7}{21} = \frac{2}{21}(\text{Sacrifice})$$

2 Adjustment of General Reserve

Amount to be debited to A's Capital $= 42{,}000 \times \frac{2}{21} =$ ₹4,000 Amount to be credited to B's Capital $= 42{,}000 \times \frac{2}{21} =$ ₹4,000

3

Revaluation Account

Dr. **Cr**

Particulars		₹	Particulars	₹
To Fixed Assets		15,000	By Stock	50,000
To Provision for Doubtful Debts (1,20,000 × 6%)		7,200	By Creditors	3,700
To Profit transfer to:				
A's Capital A/c	18,000			
B's Capital A/c	13,500	31,500		
		53,700		53,700

Question 18.

X, Y and Z are partners in a firm sharing profits and losses as 5:4:3. Their Balance Sheet as at 31st March, 2016 was:

Liabilities		₹	Assets	₹
Sundry Creditors		40,000	Cash at Bank	40,000
Outstanding Expenses		15,000	Sundry Debtors	2,10,000
General Reserve		75,000	Stock	3,00,000
Capital A/cs:			Furniture	60,000
X	4,00,000		Plant and Machinery	4,20,000
Y	3,00,000			
Z	2,00,000	9,00,000		
		10,30,000		10,30,000

From 1st April, 2016, they agree to alter their profit-sharing ratio as 4:3:2. It is also decided that

a. Furniture be taken at 80% of its value.
b. Stock be appreciated by 20%.
c. Plant and Machinery be valued at ₹ 4, 00,000.
d. Outstanding Expenses be increased by ₹13,000.

Partners agreed that altered values are not to be recorded in the books and they also do not want to distribute the General Reserve. You are required to pass a single Journal entry to give effect to the above. Also, prepare revised Balance Sheet

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	X's Capital A/c	Dr.		2,500	
	To Z's Capital A/c	Dr.			2,500
	(Being revaluation profit and General reserve adjusted on change in profit sharing ratio)				

Balance Sheet

Liabilities		₹	Assets	₹
Sundry Creditors		40,000	Cash at Bank	40,000
Outstanding Expenses		15,000	Sundry Debtors	2,10,000
General Reserve		75,000	Stock	3,00,000
Capital A/cs:			Furniture	60,000
X	4,00,000		Plant and Machinery	4,20,000
Y	3,00,000			
Z	2,00,000	9,00,000		
		10,30,000		10,30,000

Working Notes:
1 Calculation of Sacrificing (or Gaining) Ratio
Old Ratio (X,Y and Z) = 5:4:3
New Ratio (X,Y and Z) = 4:3:2
Sacrificing (or Gaining) Ratio= Old Ratio- New Ratio

$$\text{X's Share} = \frac{5}{12} - \frac{4}{9} = \frac{15-16}{36} = \frac{-1}{36}\text{(Gain)}$$

$$\text{Y's Share} = \frac{4}{12} - \frac{3}{9} = \frac{12-12}{36} = \text{(Nil)}$$

$$\text{Z's Share} = \frac{3}{12} - \frac{2}{9} = \frac{9-8}{36} = \frac{1}{36}\text{(Sacrifice)}$$

2 Calculation of Profit or Loss on Revaluation

Particulars	Amount (₹)
Increase in Stock	60,000 (Cr.)
Decrease Furniture	(12,000)(Dr.)
Decrease in Plant and Machinery	(20,000)(Dr.)
Increase in Outstanding Expenses	(13,000)(Dr.)
Profit on Revaluation	15,000(Cr.)

3 Adjustment of Profit on Revaluation and General Reserve
Amount for Adjustment = Profit on Revaluation + General Reserve = 15,000+75,000= Rs 90,000

$$\text{Amount to be debited to X's Capital} = 90,000 \times \frac{1}{36} = ₹\,2,500$$

$$\text{Amount to be credited to Z's Capital} = 90,000 \times \frac{1}{36} = ₹\,2,500$$

4

Partner's Capital Accounts

Dr Cr

Particulars	X	Y	Z	Particulars	X	Y	Z
To Z's Capital A/c	2,500	-	-	By Balance B/d	4,00,000	3,00,000	2,00,000
				By X's Capital A/c	-	-	2,500
				By Y's Capital A/c			
To Balance c/d	3,97,500	3,00,000	2,02,500				
	4,00,000	3,00,000	2,02,500		4,00,000	3,00,000	2,02,500

Question 19.

Balance Sheet of X and Y, who share profits and losses as 5:3, as at 1st April, 2016 is:

Liabilities	₹	Assets	₹
X's Capital	52,000	Goodwill	8,000
Y's Capital	54,000	Machinery	38,000
General Reserve	4,800	Furniture	15,000
Sundry Creditors	5,000	Sundry Debtors	33,000
Employee's Provident Fund	1,000	Stock	7,000
Workmen Compensation Reserve	10,000	Bank	25,000
		Advertisement Suspense's A/c	800
	1,26,800		1,26,800

On the above date, they decided to change their profit-sharing ratio to 3:5 and agreed upon:

a. Goodwill be valued on the basis of two years' purchase of the average profit of the last three years. Profits for 2013-14 - ₹7,500; 2014 -15- ₹ 4,000; 2015-16- ₹ 6,500.
b. Machinery and Stock be revalued at ₹45,000 and ₹8,000 respectively.
c. Claim on account of workmen compensation is ₹6,000.

Prepare Revaluation Account, Partners' Capital Accounts and the Balance Sheet of the new firm.

Solution:

Revaluation Account

Dr Cr

Particulars		₹	Particulars	₹
To Profit transferred to:			By Machinery A/c	7,000
X's Capital A/c	5,000		By Stock A/c	1,000
Y's Capital A/c	3,000	8,000		
		8,000		8,000

Partner's Capital Account

Dr. **Cr.**

Particulars	X	Y	Particulars	X	Y
To Advertisement Suspense A/c	500	300	By Balance B/d	52,000	54,000
To Goodwill A/c	5,000	3,000	By General Reserve A/c	3,000	1,800
To X's Capital (Adjustment of Goodwill)	-	3,000	By WCF	2,500	1,500
To Balance c/d	60,000	54,000	By Revaluation A/c (Profit)	5,000	3,000
			By Y's Capital A/c (Adjustment Goodwill)	3,000	-
	65,500	60,300		65,500	60,300

Balance Sheet
As on April 01, 2016 (after Change in Profit Sharing Ratio)

Liabilities	₹	Assets	₹
X's Capital	52,000	Goodwill	8,000
Y's Capital	54,000	Machinery	38,000
General Reserve	4,800	Furniture	15,000
Sundry Creditors	5,000	Sundry Debtors	33,000
Employee's Provident Fund	1,000	Stock	7,000
Workmen Compensation Reserve	10,000	Bank	25,000
		Advertisement Suspense's A/c	800
	1,26,800		1,26,800

Working Notes:

1 Calculation of Sacrificing (or Gaining) Ratio

Old Ratio (X and Y)= 5:3

New Ratio (X and Y) = 3:5

Sacrificing (or Gaining) Ratio= Old Ratio- New Ratio

$$\text{X's Share}=\frac{5}{8}-\frac{3}{8}=\frac{2}{8}(\text{Sacrifice})$$

$$\text{Y's Share}=\frac{3}{8}-\frac{5}{8}=\frac{-2}{8}(\text{Gain})$$

2 Calculation of New Goodwill

Goodwill= Average Profit × Number of Year's Purchase= 6,000 × 2= ₹12,000

$$\text{Average Profit}=\frac{7,500+4,000+6,500}{3}=₹6,000$$

$$\therefore \text{Goodwill}=6,000\times 2=₹12,000$$

3 Adjustment of Goodwill

$$\text{X will be credited by } 12,000\times\frac{2}{8}=₹3,000$$

$$\text{Y will be debited by } 12,000\times\frac{2}{8}=₹3,000$$

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	Workmen's Compensation Reserve A/c	Dr.		10,000	
	To Workmen's Compensation Claim A/c				6,000
	To X's Capital A/c				2,500
	To Y's Capital A/c				1,500
	(Being workmen's compensation claim distributed among partners in their old ratio i.e.5:3)				
	X's Capital A/c			5,000	
	Y's Capital A/c			3,000	
	To Goodwill A/c				8,000
	(Being goodwill written off among partners in their old ratio)				
	X's Capital A/c			500	
	Y's Capital A/c			300	
	To Advertisement suspense A/c				800
	(Being advertisement suspense written off among partners in their old ratio)				
	General Reserve A/c	Dr		4,800	
	To X's Capital A/c				3,000
	To Y's Capital A/c				1,800
	(Being general reserve distributed among partners in their old ratio)				
	Revaluation A/c	Dr.		8,000	
	To X's Capital A/c				5,000
	To Y's Capital A/c				3,000
	(Being revaluation profit distributed among partners in their old ratio)				
	Y's Capital A/c	Dr.		3,000	
	To X's Capital A/c				3,000
	(Being adjustment of goodwill made)				

Question 20.

Balance Sheet of P,Q and R who share profits in the ratio of 2:2:1 as at 31st March, 2016 is:

Liabilities		₹	Assets	₹
Capital A'cs;			Land	2,00,000
P	2,40,000		Building	80,000
Q	2,00,000		Plant	1,60,000
R	1,60,000	6,00,000	Stock	2,10,000
General Reserve		48,000	Debtors	60,000
Creditors		55,000	Cash	10,000
Bills Payable		17,000		
		7,20,000		7,20,000

From 1st April, 2016 the partners decided to share the profits equally. For this purpose, the following adjustments were agreed upon:

a. The Goodwill of the firm should be valued at₹ 60,000.
b. Land should be valued at ₹3, 00,000 and Building and Plant should be depreciated by 5%. Stock be valued at ₹2, 25,000.
c. Creditors amounted to ₹2,000 were not likely to be claimed and hence should be written off.

You are required to:

i. record necessary Journal entries to give effect to the above agreement, without opening the Revaluation Account;
ii. prepare Capital Accounts of the Partners and
iii. prepare Balance Sheet of the firm after reconstitution.

Solution:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	R's Capital A/c	Dr.		8,000	
	To P's Capital A/c				4,000
	To Q's Capital A/c				4,000
	(Being adjustment of goodwill made)				
	R's Capital A/c	Dr.		14,000	
	To P's Capital A/c				7,000
	To Q's Capital A/c				7,000
	(Being profit on revaluation adjustment)				
	General Reserve A/c	Dr.		48,000	
	To P's Capital A/c				19,200
	To Q's Capital A/c				19,200
	To R's Capital A/c				9,600
	(Being general reserve distributed among partners in old ratio)				

Partners Capital Accounts

Dr. Cr.

Particulars	P	Q	R	Particulars	P	Q	R
To P's Capital A/c (Goodwill)			4,000	By Balance b/d	2,40,000	2,00,000	1,60,000
To Q's Capital A/c (Goodwill)			4,000	By R's Capital A/c (Goodwill)	4,000	4,000	-
To P's Capital A/c (Revaluation)			7,000	By R's Capital A/c (Revaluation)	7,000	7,000	-
To Q's Capital A/c (Revaluation)			7,000	By General Reserve	19,200	19,200	9,600
To Balance c/d	2,70,200	2,30,200	1,47,600				
	2,70,200	**2,30,200**	**1,69,600**		**2,70,200**	**2,30,200**	**1,69,600**

Balance Sheet

Liabilities		₹	Assets	₹
Creditor's		55,000	Land	2,00,000
Bill's payable		17,000	Building	80,000
Capital A/c			Plant	1,60,000
P	2,70,200		Stock	2,10,000
Q	2,30,200		Debtors	60,000
R	1,47,600	6,48,000	Cash	10,000
		7,20,000		7,20,000

Working Notes:

1 calculation of Sacrificing (or Gaining) Ratio
Old Ratio (X,Y and Z)=2:2:1
New Ratio (X,Y and Z)= 1:1:1
Sacrificing (or Gaining) Ratio= Old Ratio- New Ratio

$$\text{P's Share}= \frac{2}{5}-\frac{1}{3}=\frac{6-5}{15}=\frac{1}{15}\text{(Sacrifice)}$$

$$\text{Q's Share}=\frac{2}{5}-\frac{1}{3}=\frac{6-5}{15}=\frac{1}{15}\text{(Sacrifice)}$$

$$\text{R's Share}= \frac{1}{5}-\frac{1}{3}=\frac{3-5}{15}=\frac{-2}{15}\text{(Gain)}$$

2 Adjustment of Goodwill

$$\text{Amount to be credited to P's Capital} = 60,000 \times \frac{1}{15} = \text{Rs. } 4,000$$

$$\text{Amount to be credited to Q's Capital} = 60,000 \times \frac{1}{15} = \text{Rs. } 4,000$$

$$\text{Amount to be credited to Z's Capital} = 60,000 \times \frac{2}{15} = \text{Rs. } 8,000$$

3 Calculation of Profit or Loss on Revaluation

Particulars	Amount (Rs)
Increase in Land	1,00,000 (Cr.)
Decrease in Building	(4,000)(Dr.)
Decrease in Plant	(8,000)(Dr.)
Increase in Stock	15,000(Cr.)
Decrease in Creditors	2,000(Cr.)
Profit on Revaluation	**1,05,000(Cr.)**

4 Adjustment of Profit on Revaluation

$$\text{Amount to be credited to P's Capital} = 1,05,000 \times \frac{1}{15} = \text{Rs. } 7,000$$

$$\text{Amount to be credited to Q's Capital} = 1,05,000 \times \frac{1}{15} = \text{Rs. } 7,000$$

$$\text{Amount to be credited to Z's Capital} = 1,05,000 \times \frac{2}{15} = \text{Rs. } 14,000$$