TS Grewal

Class 12

Accountancy Solutions

Vol.-1

CHAPTER-5 – Admission of a Partner

Solution 1

Old Ratio of X, Y and Z = 5:3:2
A gets 1/5 share of profits
Let, profit share of all partners, on A's admission, be 1
Therefore, X, Y, and Z combined share = 1 − A's share = 1 – 1/5 = 4/5
New Ratio = Old Ratio x Combines Share of X, Y and Z
Therefore,
A = 5/10 x 4/5 = 20/50
B = 3/10 x 4/5 = 12/50
C = 2/10 x 4/5 = 8/50
Therefore, new profit sharing ratio between A, X, Y and Z = 10:6:4:5

Solution 2

Old Ratio of Ravi and Mukesh = 7/10:3/10
Ashok is given 3/7 share in firm by Ravi sacrificing 2/7 and Mukesh sacrificing 1/7
New Ratio = Old Ratio – Sacrificing Ratio
Ravi= 7/10 – 2/7 = 29/70
Mukesh = 3/10 – 1/7 = 11/70
Therefore, new profit sharing ratio = 29/70:11/70:3/7 OR 29:11:3/70 = 29:11:30

Solution 3

Old Ratio of A and B = 7:5

C gets 1/6 share of profit by A sacrificing 1/24 and B sacrificing 1/8

New Ratio = Old Ratio – Sacrificing Ratio

A = 7/12 – 1/24 = 13/24

B = 5/12 – 1/8 = 7/24

Therefore, new profit sharing ratio between A, B, and C will be = 13:7:4

Solution 4

The PSR of A, B, and C = 3:2:1

A's Old Share = 3/6

D's share = 1/8 which he gets 1/6 from both B and C

B's New Share = 2/6 – 1/18 = 13/48

C's New Share = 1/6 – 1/16 = 5/48

Therefore, new profit sharing ratio between A, B, C, and D is = 24:13:5:6

Solution 5

Old Ratio of Bharati and Astha = 3:2

Dinkar's Share = 1/5

Bharati's Sacrifice = 1/5 x 1/2 = 1/10

Astha's Sacrifice = 1/5 x 1/2 = 1/10

Therefore,

Bharati's New Share = 3/5 – 1/10 = 6-1/10 = 5/10

Astha's New share = 1/5 – 1/10 = 4-1/10 = 3/10

Dinkar's New share = 1/5 x 2/2 =2/10

Therefore, new profit sharing ratio of Bharati, Astha and Dinkar = 5:3:2

Solution 6

Old Ratio of X and Y = 3:2
Z is admitted with ¼ share in profit
Sacrificing Ratio = 2:1
X's Sacrifice = 2/3 x ¼ = 2/12
Y's Sacrifice = 1/3 x ¼ = 2/12
New Ratio = Old ratio – Sacrificing ratio
Therefore,
X's New Share = 3/5 – 2/12 = 36 – 10/60 = 26/60
Y's New Share = 2/5 – 1/2 = 24 – 5/60 = 19/60
Z's New Share = ¼ x 15/15 = 15/60
Therefore, new profit sharing ratio of X, Y and Z = 26:19:15

Solution 7

Old ratio of R and S = 5:3
Sacrificing ratio = Old Ratio x Surrender Ratio
R's Sacrifice = 5/8 x ¼ = 5/32
S's Sacrifice = 3/8 x 1/5 = 3/40
New Ratio = Old Ratio – Sacrificing Ratio
R's New Share = 5/8 – 5/32 = 15/32
S's New Share = 3/8 x 1/5 = 3/40
T's Share = R's Sacrifice + S's Sacrifice = 5/32 + 3/40 = 25 +12/160 = 37/160
Therefore, new profit sharing ratio of R, S and T = 15/32:15/32:31/160 = 75:48:37/160 = 75:48:37

Solution 8

Old Ratio of Kabir and Farid = 7:5
Kabir and Farid's sacrifice = 2/10 and 1/10 = 2:1
Jyoti's Share = 2/10 (from Kabir) + 1/10 (from Farid) = 3/10
New Ratio = Old Ratio – Sacrificing Ratio
Kabir's New Share = 7/10 – 2/10 = 5/10
Farid's New share = 3/10 – 1/10 = 2/10
Therefore, new profit sharing ratio of Kabir, Farid, and Jyoti = 5:2:3

Solution 9

(i)

Old Ratio of R and T = 7:5
Sacrificing Ratio = Old ratio x Surrendering Ratio
R's Sacrifice = 3/5 x 1/4 = 3/20
T's Sacrifice = 2/5 x 1/5 =2/25
New Ratio = Old Ratio – Sacrificing Ratio
Therefore, R's New Share = 3/5 – 3/20 = 9/20
T's New share = 2/5 – 2/25 = 8/25
S's share = R's Sacrifice + T's Sacrifice = 3/20 + 2/25 = 23/100
Therefore, new profit sharing ratio of R, T, and S = 9/20:8/25:23/100 = 45:32:23

(ii)

Old Ratio of A:B = 1:1
C's Profit Share = 1/4
Therefore, A and B's new combined share = 1 – 1/4 = 3/4
A's New Share = 3/4 x 2/3 = 6/12
B's New share = 3/4 x 1/3 = 3/12
Therefore, new profit sharing ratio of A, B and C = 6/12:3/12:1/4 = 2:1:1

(iii)
Old Ratio of A and B = 3:2
C's Profit Share = 1/5
A's Sacrifice = 1/5 x 1/5 = 1/25
B's Sacrifice = 1/5 x 4/5 =4/25
New Ratio = Old Ratio – Sacrificing Ratio
Therefore,
A's New Share = 3/5 – 1/25 = 15-1/25 = 14/25
B's New Share = 2/5 – 4/5 = 10-4/25 = 6/25
Therefore, new profit sharing ratio of A, B and C = 14/25:6/25:1/5 = 14:6:1:
(iv)
Old Ratio of X, Y and Z = 3:2:1
W's New Share = 1/6
Let X and Y's combined share after admission of W be 1.
Therefore, X and Y's combined share = 1 – Z's share – W's share = 1 – 1/6 – 1/6 = 4/6
New Ratio = Old Ratio x X and Y'd Combined Share
Therefore,
X's New Share = 3/5 x 4/6 = 12/30
Y's New Share = 2/5 x 4/6 = 8/30
Therefore, new profit sharing ratio of X, Y, Z and W = 12/30:8/30:1/6:1/6 = 12:8:5:5
(v)
Old Ratio of A and B = 1:1
C's New Share = 1/5
D's New Share = 1/6
Let partners' combined share after admission of C and D be 1.

Therefore, combined share of A and B = 1 – C's Share – D's Share
= 1 – 1/5 – 1/6 = 19/30
New Ratio = Old Ratio x A and B's Combined Share
Therefore,
A's New Share = 1/2 x 19/30 = 19/60
B's New Share = 1/2 x 19/30 = 19/60
Therefore, new profit sharing ratio of A, B, C and D = 19/60:19/60:1/5:1/6 = 19:19:12:10
(vi)
Old Ratio of A and: B = 3:2
C's New Share = 1/4
Let partners' combined share after admission of C be 1.
Therefore, A and B's Combined Share = 1 – C's Share = 1 – ¼ = 3/4
Therefore,
A's New Share = 3/4 x 1/2 = 3/8
B's New Share = 3/4 x 1/2 = 3/8
Therefore, new profit sharing ratio of A, B and C = 3/8:3/8:14 = 3:3:2

Solution 10
Old Ratio of X and Y = 3:2
Sacrificing Ratio = Old Ratio x Surrendering Ratio
X's Sacrifice = 3/5 x 1/3 = 3/15
Y's Sacrifice = 2/5 x 1/4 = 2/20
New Ratio = Old Ratio – Sacrificing Ratio
Therefore,
X's New Share = 3/5 – 3/15 = 6/15
Y's New Share = 2/5 – 2/20 = 6/20

X sacrificed for P = 315
Y sacrificed for Q = 210
Therefore, new profit sharing ratio of X, Y, P and Q = 6/15:6/20:3/15:2/10 = 10:6:4:5

Solution 11
Old Ratio of Rakesh and Suresh = 4:3
New Ratio of Rakesh, Suresh and Zaheer = 7:4:3
Sacrificing Ratio = Old Ratio – New Ratio
Therefore,
Rakesh's Share = 4/7 – 7/14 = 1/14
Suresh's Share = 3/7 – 4/14 = 2/14
Therefore Rakesh and Suresh's sacrificing ratio = 1/14:2/14 = 1:2

Solution 12
Old Ratio A and B = 3:2
New ratio for A, B and C = 4:3:2
Sacrificing Ratio = Old Ratio – New Ratio
A's Share = 3/5 – 4/9 = 7/45
B's Share = 2/5 – 3/9 = 3/45
Therefore, A and B's sacrificing ratio = 7/45:3/45 = 1:2

Solution 13
Old Ratio of A, B and C = 4:3:2
D's New Share = 1/3
Let A, B, and C's combined share after D's admission be 1
Therefore, A, B, and C's combined share = 1 − D's share = 1 – 1/3 = 2/3

New Ratio = Old Ratio x Combined Share
Therefore,
A's New Share = 4/9 x 2/3 = 8/27
B's New Share = 3/9 x 2/3 = 6/27
C's New Share = 2/9 x 2/3 = 4/27
Sacrificing Ratio = Old Ratio – New Ratio
A's Sacrifice = 4/9 – 8/27 = 4/27
B's Sacrifice = 3/9 – 6/27 = 3/27
C's Sacrifice = 2/7 – 4/27 = 2/27
Therefore, sacrificing ratio of A, B and C = 4:3:2

Solution 14
Old Ratio of A, B, C and D = 36:24:20:20
E's New Share = 20/100
Let A, B, C, and D's combined share on E's admission be 1
Therefore, A, B, C, and D's combined share = 1 – E's share = 1 – 2/100 = 80/100
New Ratio = Combined Share x Shares Agreed by A, B, C, and D
A's New Share = 80/100 x 3/10 = 24/100
B's New Share = 80/100 x 4/10 = 32/100
C's New Share = 80/100 x 2/10 = 16/100
D's New Share = 80/100 x 1/10 = 8/100
Therefore, new profit sharing ratio of A, B, C, D and E = 24/100:32/100:16/100:20/100 = 6:8:4:2:5

Solution 15

Old Ratio of X and Y = 3:2
X's Sacrifice = 1/3 x 3/5 = 3/15
Y's Sacrifice = 1/10
Therefore, the Sacrificing Ratio = 3/15:1/10 = 2:1
New Share = Old Share – Sacrificed Share
Therefore,
X's New Share = 3/5 – 3/15 = 6/15
Y's New Share = 2/5 – 1/10 = 3/10
Z's New Share = 3/15 – 1/10 = 9/30
Therefore, new profit sharing ratio of X, Y and Z = 6/15:3/10:9/30 = 4:3:3

Solution 16

Calculation of New Profit Sharing Ratio:
Old Ratio of A, B and C = 2:2:1
E's New Share on admission = 1/6
Therefore, remaining share = 1 – 1/6 – 1/5 = 30 – 5 – 6/30 = 19/30
A and B sharing ratio = 2:2
Therefore,
A's New Share = 19/30 x 2/4 = 38/120
B's New Share = 19/30 x 2/4 = 28/120
C's New Share = 1/6 x 20/20 = 20/120
Note: Assume that sacrificing ratio of A and B is their old ratio.
Sacrificing Ratio = Old Ratio – New Ratio
A's Sacrifice = 2/5 – 19/60 = 24 – 19/60 = 5/60
B's Sacrifice = 2/5 – 19/60 = 24 – 19/60 = 5/60
Therefore, sacrificing ratio of A and B = 1:1

Solution 17

Old Ratio of A and: B = 3:2

C's New Share = 1/6

Let A, B, C, and D's Combined Share be 1 = 1 − E's share = 1 – ¼ = 3/4

New Ratio = Old ratio x Combined Share

Therefore, A's New Share = 3/5 x ¾ = 9/20

B's New Share = 2/5 x ¾ = 6/20

Therefore, new profit sharing ratio of A, B and C = 9/20:6/20:1/4 = 9:6:5

Note: After C's admission the profit sharing ratio will become old ratio in order to determine new profit sharing ratio on D's admission to the firm.

Ratio before D's admission = 9:6:5

D's New Share = 20/100

Let A, B and C's combined share be 1 =1 – D's share = 1 – 20/100 = 80/100

New Ratio = Old ratio x Combined Share

Therefore,

A's New Share = 9/20 x 80/100 = 72/200

B's New Share = 6/20 x 80/100 = 48/200

C's New Share = 5/20 x 80/100 = 40/200

Therefore, new profit sharing ratio of A, B, C and D = 12/200:48/200:40/200:20/100 = 9:6:5:5

Solution 18

Old Ratio of P and Q = 3:2

R's new share = 1/5 which is acquired from P

Therefore, P's remaining share = 1 – 1/5

P's Sacrifice = 1/5 x 1/5 = 1/25

Q's Sacrifice = 4/25

Therefore,

P's New Share = 3/5 – 1/25 = 15 – 1/25 = 14/25

Q's New share – 2/5 – 4/25 = 10 – 4/25 = 6/25

R's New Share = 1/5 x 5/5 = 5/25

Therefore, new profit sharing ratio of P, Q and R = 14:6:5

Solution 19

Please find below the journal entries of the transactions:

	Journal Book				
Date	**Particulars**		**L.F.**	**Dr.**	**Cr.**
	A's Capital A/c	Dr.		10,000	
	B's Capital A/c	Dr.		5,000	
	To Goodwill A/c				15,000
	(Being goodwill written off)				
	Total			**15,000**	**15,000**

Working Note:

Calculation of Goodwill Written Off

Amount debited to A's Capital A/c = 15,000 x 2/3 = ₹10,000

Amount debited to B's Capital A/c = 15,000 x 1/3 = ₹5,000

C's share of goodwill will not be entered because it was paid privately.

Solution 20

Old ratio of A and B = 2:5

C's New Share = 1/4

Let A, B, and C's combined share be 1 = 1 – C's share = 1 – ¼ = 3/4

New ratio = Old ratio x Combined Share

Therefore,

A's New Share = 2/7 x 3/4 = 6/28

B's New Share = 5/7 x 3/4 = 15/28

Therefore, new profit shaeing ratio of A, B and C = 6/28:15/28:1/4 = 6:15:7

C's Share of Goodwill = 14,000

A gets 14,000 x 2/7 = ₹4,000

B gets 14,000 x 15/7 = ₹10,000

Solution 21

Please find below the journal entries of the transactions:

Date	Particulars		L.F.	Amount	Amount
	Cash A/c	Dr.		21,000	
	To Premium for Goodwill A/c				21,000
	(Being C's share of goodwill)				
	Premium for Goodwill A/c	Dr.		21,000	
	To A's Capital A/c				9,000
	To B's Capital A/c				12,000
	(Being distribution of C's goodwill to A and B in sacrificing ratio of 3:4)				

	Total			**42,000**	**42,000**

Working Notes:

Old Ratio of A and B = 3:2

A's Sacrifice = 3/5 x 1/5 = 3/25

B's Sacrifice = 2/5 x 2/5 = 4/25

New Ratio – Old Ratio – Sacrificing Ratio

Therefore,

A's New Share = 3/5 – 3/25 = 12/25

B's New Share = 2/5 – 4/25 = 6/25

C's New Share = 3/25 + 4/25 = 7/25

Therefore, new profit sharing ratio of A, B and C = 12:6:7

Calculation of Goodwill:

C's Share of Goodwill = 75,000 x 7/25 = 21,000

A's Share of Goodwill = 21,000 x 3/7 = ₹9,000

B's Share of Goodwill = 21,000 x 4/7 = ₹12,000

Solution 22

Please find below the journal entries of the transactions:

(a)

Journal Book					
Date	**Particulars**		**L.F.**	**Amount (Dr.)**	**Amount (Cr.)**
	Cash A/c	Dr.		2,000	
	To Premium for Goodwill A/c				2,000
	(Being D's share of goodwill brought in)				
	Premium for Goodwill A/c	Dr.		2,000	

	To B's Capital A/c				1,200
	To C's Capital A/c				800
	(Being distribution of D's goodwill in sacrificing ratio 3:2)				
	Total			**4,000**	**4,000**

Working Note:

Calculation of Goodwill:

B's Goodwill = 2,000 x 3/5 = ₹1,200

C's Goodwill = 2,000 x 2/5 =₹8000

(b)

Please find below the journal entries of the transactions:

Journal Book					
Date	**Particulars**		**L.F.**	**Amount (Dr.)**	**Amount (Cr.)**
	Cash A/c	Dr.		2,100	
	To Premium for Goodwill A/c				2,100
	(Being D's goodwill brought in)				
	Premium for Goodwill A/c	Dr.		2,100	
	To B's Capital A/c				1,400
	To C's Capital A/c				700
	(Being D's goodwill distributed in sacrificing ratio of 2:1)				
	Total			**4,200**	**4,200**

Working Note:
Calculation of Goodwill:
Sacrificing Ratio of B and C = 2:1
B's Goodwill = 2,100 x 2/3 = ₹1,400
C's Goodwill = 2,100 x 1/5 = ₹700

Solution 23
Please find below the journal entries of the transactions:

Journal Book					
Date	**Particulars**		**L.F.**	**Amount (Dr.)**	**Amount (Cr.)**
	Cash A/c	Dr.		15,000	
	To Premium for Goodwill A/c				15,000
	(Being D's goodwill brought in)				
	Premium for Goodwill A/c	Dr.		15,000	
	To B's Capital A/c				15,000
	(Being transfer of goodwill to B's Capital A/c)				
	C's Capital A/c	Dr.		3,750	
	To B's Capital A/c				3,750
	(Being goodwill charges due to C's gain in profit)				
	Total			**33,750**	**33,750**

Working Notes:
Calculation of Sacrificing Ratio:
Let B and C's combined share be 1 = 1 – D's share = 1 – 1/3 = 2/3
B and C's profit sharing = 2/3 x 1/2 = 1/3 each
Sacrificing Ratio = New Ratio – Old Ratio
Therefore,
B's New Share = 3/4 – 1/3 = 5/12
C's New Share = 1/4 – 1/3 = -1/12 (Gain)
Since C gains, his gain will be debited and given to his sacrificing partner, B.
15,000 x 3/1 = ₹45,000 x 1/12 = ₹3,750

Solution 24
Please find below the journal entries of the transactions:

Journal Book					
Date	**Particulars**		**L.F.**	**Amount (Dr.)**	**Amount (Cr.)**
	Cash A/c	Dr.		25,000	
	To Premium for Goodwill A/c				25,000
	(Being C's goodwill brought into firm)				
	Premium for Goodwill A/c	Dr.		25,000	
	To M's Capital A/c				12,500
	To J's Capital A/c				12,500
	(Being distribution of C's goodwill)				
	Total			**50,000**	**50,000**

Working Notes:
Calculation of Sacrificing Ratio:
Sacrificing Ratio = Old Ratio – New Ratio
M's Sacrifice = 3/5 – 5/10 = 1/10
J's Sacrifice = 2/5 – 3/10 = 1/10
Therefore, sacrificing ratio = 1:1
Calculation of Goodwill:
M's Goodwill = 25,000 x 1/2 = ₹12,500
J's Goodwill = 25,000 x 1/2 = ₹12,500

Solution 25
Please find below the journal entries of the transactions:

Journal Book					
Date	**Particulars**		**L.F.**	**Dr.**	**Cr.**
	Cash A/c	Dr.		52,000	
	To C's Capital A/c				40,000
	To Premium for Goodwill A/c				12,000
	(Being C's goodwill and capital brought in)				
	Premium for Goodwill A/c	Dr.		12,000	
	To A's Capital A/c				6,000
	To B's Capital A/c				6,000
	(Being distribution of C's goodwill)				
	Total			**64,000**	**64,000**

Working Notes:
Sacrificing Ratio = 1/10:1/10 = 1:1
Calculation of New Profit Sharing Ratio:

Old Ratio of A and B = 5:3
New Ratio = Old Ratio - Sacrificing Ratio
Therefore,
A's New Share = 5/8 – 1/10 = 21/40
B's New Share = 3/8 – 1/10 = 11/40
Therefore, new profit sharing ratio of A, B and C = 21/40:11/40:1/5 = 21:11:8

Calculation of Distribution of Goodwill:

A's Goodwill = 12,000 x 1/2 = ₹6,000
B's Goodwill = 12,000 x 1/2 = ₹6,000