Unit : 2 Treatment of Goodwill in Partnership Account

Introduction

→ Goodwill is the value of reputation of a firm in respect of profit.
expected in Future
Over and above the normal rate of profit earned by similar firms
in the same locality.

→ Goodwill is an intangible asset.
i.e. it cannot be seen or it can not be felt. it can be valued in terms of money.

→ The necessity for valuation of Goodwill in a firm is arise in the following situation :-

1. Change in profit sharing ratio among the partner.
2. Admission of a New partner.
3. Death or Retirement of a partner.
4. When the business is dissolved or sold.

Method of Valuation of Goodwill.

(1) Avg. Profit Method

→ In this method, Avg. profit of past years are Adjusted for any expected change in future.
i.e. Abnormal loss, Abnormal Gain and salary to partner and Interest on capital not provided.

→ For Avg. of profit Method either simple avg. or weighted avg. is used :—

Simple Avg.
⇓
If there is no clear trend of profit then apply simple avg.

weighted Avg. method
⇓
If there is increasing or decreasing trend in profit then it is better to apply weighted Avg. method.
⇓
example:
profit of firm of last 5 years
30,000, 40,000, 50,000, 60,000 and 70,000
Here, profit is in increasing trend.

→ ∴ Goodwill = Avg. profit × No. of year purchase

(2) Super Profit Method

→ This method is based on the principle that Goodwill helps the business to earn Something more than the Normal profit earned by other business. i.e. super profit

→ ∴ Good will = Super profit × No. of year purchase

Here,

Super profit = Avg. Actual profit - Normal profit

Avg. Actual profit = total Adjusted profit for the past period / No. of years → After considering Abnormal items and salary and Int: on capital not provided

Normal profit = Capital employed × NRR (No. of rate of return)

Capital employed = Total Assets	XX
(-) Current liability	(XX)
	XXX.

(3) Annuity Method

→ The major drawback of earlier Method is that time value of money is not considered.

→ Under this method, Super profit which are to be earned in future year are discounted to their present value and Goodwill is determined based on such discounted value.

∴ Goodwill = total of (Super profit x P.V. of each year)

OR

= Super profit x Annuity number

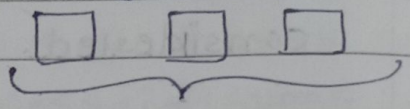
Example:

Year	Super profit	Dis.factor	P.V. of super profit
1	3000	0.8969	2608.80
2	3000	0.7561	2268.30
3	3000	0.6575	1972.50
4	3000	0.5718	1715.40
5	3000	0.4972	1491.60
		3.3522	10,056.60

(4) Capitalization Method

B.K & Co.

Other similar Business



Actual profit = ₹2,00,000

NRR @ 10 %

So, to earn the profit of ₹2,00,000 as per NRR @ 10 %.

Capital required

profit = Capital × NRR ~~employed~~

~~2,00,000~~ = ~~Ca~~ employed

2,00,000 = Capital employed × 10 %.

So, capital employed = 20,00,000

(it is Normal capital employed)

⇓

But, BK & Co.'s has actual capital employed is ₹ 15,00,000 only

So, difference between Normal capital employed and actual capital employed is "Goodwill"

∴ Goodwill = Normal capital employed - Actual capital employed

Here,

→ Normal capital employed = Avg profit / Super profit / NRR

→ Actual Capital employed = Total Asset — XX

- current liability — (XX)

XXX

Ill-1

① Avg. profit Method

Year	Profit	weight	weighted profit
2019	1,20,000	1	1,20,000
2020	1,25,000	2	2,50,000
2021	1,30,000	3	3,90,000
2022	1,50,000	4	6,00,000
		10	13, 60,000

Weighted Avg. profit = $\frac{13,60,000}{10}$ = 1,36,000

Good will = Avg profit x No. of year purchase
= 1,36,000 x 3
= **4,08,000**

② Normal profit = 5,00,000 x 20 %
= 1,00,000

Super profit = Avg. profit - Normal profit
= 1,36,000 - 1,00,000
= 36,000

Good will = Super profit x
No. of year purchase
= 36,000 x 3
= **1,08,000**

③ Annuity Method

Year	Super profit	Dis. factor 20%
1	36,000	0.8333
2	36,000	0.6944
3	36,000	0.5787
		2.1064

Goodwill = Super profit × Annuity number
= 36,000 × 2.1064
= **75,830.4**

④ Capitalisation Method

Normal capital employed = $\frac{1,36,000}{20\%}$
= 6,80,000

Actual capital employed = 5,00,000

Goodwill = Normal capital employed − Actual capital employed
= 6,80,000 − 5,00,000
= **1,80,000**

Ill-2

Profit:

2019	40,000
2020	36,000
2021	(6000)
2022	50,000
Total	1,20,000
Avg profit ($\frac{1,20,000}{4}$)	30,000
(-) salary	(6000)
Avg profit (Adj.)	24,000

Normal profit = 1,50,000 x 12 %
= 18,000

Super profit = Avg. profit - Normal profit
= 24,000 - 18,000
= 6000

Good will = Super profit x No. of years purchase
= 6000 x 5
= 30,000

Sacrificing Ratio and Gaining Ratio

A change in profit sharing ratio of partner means that, one or more existing partner will surrender a part of their share in profit. in favour of one or more existing partner or New partner.

Such change in PSR may arise due to
- Admission of New partner
- Retirement, Death of a partner
- Mutual agreement

Sacrifice
→ Partner's whose share in profit is decreased due to change in PSR

→ Sacrifice Ratio = Old ratio − New ratio

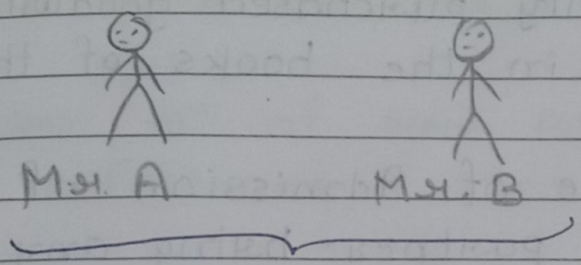
Gain
→ Partner's whose share in profit is increased due to change in PSR.

→ Gaining Ratio = New ratio − Old ratio.

Hidden or Inferred or Implied Goodwill

Sometimes, The value of Goodwill is NOT specifically given and has to cal^{n} from the Arrangement of capital or profit sharing ratio.

eg.



Partners

↓	↓	
Capital 1,00,000	1,50,000	New partner $^{1}/_{4}^{th}$ share in profit and bring capital of ₹1,00,000

∴ Value of firm = 1,00,000 × 4
= ₹4,00,000

(-)less = Total capital of all the partners
(1,00,000 + 1,50,000 + 1,00,000) (3,50,000)

Hidden Goodwill 50,000

Accounting Treatment of Goodwill in case of Admission of Partner

→ The Goodwill ~~share~~ should be recorded in the books only when some consideration in money has been paid for it.
Therefore, only purchased goodwill should be recorded in the books of the firm.

→ At the time of Admission of Partner If incoming partner bring any amt. of Goodwill, then such amt. should be distributed among the other existing partner in their sacrificing ratio.
It can not be recorded as a Goodwill in the BOA of the firm because it is a self generated Goodwill.

→ When Incoming partner pay Goodwill to old partner privately (i.e. without involvement of firm) then No entry should be passed in BOA.

→ When Incoming partner bring his shares in Goodwill and old partner immediately withdraw it

Bank A/C Dr.
To old partner's capital

Old partner's capital A/C Dr
To Bank A/C

Example 1 :-

Goodwill of the firm = ₹3,00,000

A and B partner, PSR is 3:2

New partner C is admitted with 1/6th share bring capital 5,00,000

(Here, Question is silent regarding sacrifice made by old partner, so sacrifice as per their old PSR.)

Ans. ⇒ Cal^{n} of New PSR

	old share	-	sacrificing share		
A	$\frac{3}{5}$	$-\left(\frac{1}{6} \times \frac{3}{5}\right)$	$= \frac{3}{5} - \frac{3}{30}$		$= \frac{15}{30}$
B	$\frac{2}{5}$	$-\left(\frac{1}{6} \times \frac{2}{5}\right)$	$= \frac{2}{5} - \frac{2}{30}$		$= \frac{10}{30}$
C	$\frac{1}{6}$				

$$\frac{15}{30} : \frac{10}{30} : \frac{1}{6} \times 5$$

New = 15 : 10 : 5

3 : 2 : 1

⇒ Sacrificing Ratio.

A = 3/30

B = 2/30

So, A : B

3 : 2

Journal Entry :

① New partner bring the capital

Bank / Cash A/C	Dr.	5,00,000	
To C's capital A/C			5,00,000

② Goodwill Amt bring by New Partner and such amt credited to old partner's in their sacrifice ratio

Bank A/C	Dr.	50,000	(3,00,000 × 1/6)
To A's capital A/C			30,000
To B's capital A/C			20,000

Example - 2 :-

Jonty and Bunty are partner and their PSR is 2 : 1

New partner Ms. Pari is admitted with 1/5 share in profit, which is

Given by the old partner equally

Goodwill of the firm = ₹ 4,00,000

Ms. Pari bring ₹3,00,000 as a capital and brought her share of Goodwill.

Ans

Ms. Pari share of Goodwill

= ₹ 4,00,000 × 1/5

= ₹ 80,000

Jonty 's sacrifice share

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

Bunty sacrifice share

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

So, Sacrifice ratio = 1 : 1

Journal Entry :

① New Partner bring the capital

Cash / Bank A/C	Dr.		
To Pari's Capital A/C			

② Bring Amt for Goodwill and credited to existing partner's

Bank A/C	Dr.	80,000	
To Bunty's Capital A/C		40,000	} In Sacrifice ratio.
To Jonty's capital A/C.		40,000	

Example -3

Mr. A and Mr. B 3 : 2
New Partner Mr. C is admitted and New PSR = 5 : 3 : 2
Goodwill of the firm is ₹ 2,00,000
Capital brought by Mr. C = ₹ 1,00,000
(No information about bringing the Goodwill share).

Ans.

∴ Mr. C's share in Goodwill = ₹ 2,00,000 × $\frac{2}{10}$

= 40,000

∴ Sacrifice ratio

New share = Old - Sacrifice

So, Sacrificing ratio = Old share - New share

A = $\frac{3}{5} - \frac{5}{10} = \frac{1}{10}$

B = $\frac{2}{5} - \frac{3}{10} = \frac{1}{10}$

Sacrificing ratio = 1 : 1

Journal Entry

① New Partner Bring the capital

Bank A/C	Dr.	1,00,000	
To C's capital A/C			1,00,000

② Goodwill amt. bring by new partner and such amt credited to old partner's in their sacrifice ratio.

C's capital A/C	Dr.	40,000	
To A's capital A/C			20,000
To B's capital A/C			20,000

} sacrifice ratio

{ In this, New partner's is not bring their share of Goodwill, so amt of Goodwill is Adjusted from their Goodwill. }

Example - 4

A, B and C = 2 : 2 : 1

D = 1/5th share

D bring his share of capital = ₹ 2,00,000

Goodwill of the firm = ₹ 50,000

Ans.

∵ D's share of Goodwill = ₹ 50,000 × 1/5

= ₹ 10,000

∴ Sacrificing Ratio = 2 : 2 : 1

(Nothing is mentioned, than old partner sacrifice is their existing old PSR)

i.e. A = 1/5 × 2/5 = 2/25

B = 1/5 × 2/5 = 2/25

C = 1/5 × 1/5 = 1/25

} 2 : 2 : 1

Journal Entry

① New partner bring the capital

Bank A/C	Dr.	2,00,000	
To D's capital A/C			2,00,000

② Goodwill amt. bring by New Partner and such amt credited to old partner's in their sacrifice ratio.

D's capital A/C	Dr.	10,000
To A's capital A/C		4000
To B's capital A/C		4000
To C's capital A/C		2000

Example - 5

A and B are equal partner C is admitted for 1/6th share who brought ₹ 60,000 as Goodwill.

New PSR = 3 : 2 : 1

Ans.

∴ Sacrifice ratio = Old - New

$$A = \frac{1}{2} - \frac{3}{6} = \frac{0}{6}$$

$$B = \frac{1}{2} - \frac{2}{6} = \frac{1}{6}$$

Only old partner B is sacrificing, so Goodwill is credited to B's Capital only

Journal Entry

(1) New partner bring the Capital

Bank A/C	Dr.	60,000	
To C's capital A/C			60,000

Ex ② Goodwill amt bring by New partner and such amt credited to old partner's in their sacrifice ratio.

C's capital A/C Dr. 60,000
To B's capital A/C 60,000

Example :6

A, B and C equal partner
D is admitted, who brought ₹5,00,000 as a capital
New PSR 3 : 3 : 2 : 2
Goodwill of the firm = ₹3,60,000

Ans.

∴ Sacrifice Ratio = Old - New

A = $\frac{1}{3} - \frac{3}{10} = \frac{10-9}{30} = \frac{1}{30}$

B = $\frac{1}{3} - \frac{3}{10} = \frac{10-9}{30} = \frac{1}{30}$

C = $\frac{1}{3} - \frac{2}{10} = \frac{10-8}{30} = \frac{4}{30}$

So, Sacrificing ratio = 1 : 1 : 4

∴ Share of D in Goodwill = 3,60,000 × $^{2}/_{10}$
= 72,000

Journal Entry

① New partner bring the capital.

Bank A/C	Dr.	5,00,000	
To D's capital A/C			5,00,000

② Goodwill amt. bring by New partner and such amt. credited to old partner in their sacrifice ratio.

D's capital A/C	Dr.	72000	
To A's capital A/C			12,000 ~~10,000~~
To B's capital A/C			12,000
To C's capital A/C			48,000

} sacrifice ratio

Accounting Treatment of Goodwill in case of change in profit sharing ratio.

In case of change in profit sharing ratio, the value of Goodwill should be ~~ad~~ determined and preferably Adjusted through capital A/C of the partner on the basis of profit sacrificing ratio.

Accounting Treatment

Gaining Partner's capital A/C Dr.
To sacrificing partner's capital A/C

ill-3

Particulars		L F	Dr. (₹)	Cr. (₹)
1. Bank A/C	Dr.		20,000	
To black's capital A/C				20,000
[being Black would pay ₹20,000 as capital]				
2. Black's capital A/C	Dr.		11,250	
To Yellow's capital A/C				8,100
To Green's capital A/C				3150
[being Capital distributed between old partners.]				

Balance Sheet

Liabilities	₹	Assets	₹
Trad payables	20,000	cash at bank	30,000
Capital:		(10,000 + 20,000)	
Yellow 33,100		sundry assets	55,000
(25,000+8100)			
Green 23,150			
(20,000+3150)			
Black 8750			
(20000-11250)	65,000		
	85,000		85,000

WN 1

Yellow = $\frac{3}{5} - \frac{6}{16} = \frac{48-30}{80} = \frac{18}{80}$

Green = $\frac{2}{5} - \frac{5}{16} = \frac{32-25}{80} = \frac{7}{80}$

Sacrificing ratio = 18 : 7

WN 2 cal^{n} of Goodwill

Goodwill = 12000 × 3 = 36,000

Black share = $\frac{5}{16} \times 36{,}000$

= 11,250

ill-4

Particulars	L F	Dr. (₹)	Cr. (₹)
Bank A/c Dr.		31,250	
To Black's capital A/c			20,000
To Yellow's capital A/c			8100
To Green's capital A/c			3150
[being Black brought amt. of capital and goodwill in cash.]			

Balance sheet

Liabilities		Amt ₹	Assets	Amt ₹
Trade payable		20,000	cash at bank	41,250
Capital:			(31,250+10,000)	
Yellow	33,100		sundry assets	55,000
Green	23,150			
black	20,000	76,250		
		96,250		96,250

WN 1 cal^{n} of amt, brought by Black

Capital	=	20,000
Goodwill	=	11,250
Total amt		31,250

ill-5

Particulars		L/F	Dr. (₹)	Cr. (₹)
1. Bank A/C	Dr.		20,000	
To Black's capital A/C				20,000
[being Black brought capital]				
2. Black's capital A/C	Dr.		11,250	
To Yellow's capital A/C				8100
To Green's capital A/C				3150
[being Capital distributed to old partners]				
3. Yellow's capital A/C			8100	
Green's capital A/C			3150	
To Bank A/C				11,250
[being Capital withdrawn by old partners]				

Balance sheet

Liabilities		Amt ₹	Assets	Amt ₹
Trade payable		20,000	cash at bank	30,000
Capital			sundry Assets	55,000
Yellow	25,000			
Green	20,000			
Black	20,000	65,000		
		85,000		85,000

11-6

Particular		L/F	Dr. (₹)	Cr. (₹)
1. Bank A/C	Dr.		20,000	
To Black's capital A/C				20,000
[being amount brought by black as capital]				

Balance sheet as on 31st December, 2022

Liabilities		Amt	Assets	Amt
Trade payable		20,000	Cash at bank	30,000
Capital			Sundry Assets	55,000
Yellow	25,000			
Green	20,000			
Black	20,000	65,000		
		85,000		85,000

ill-7

Particulars		L F	Dr. (₹)	Cr. (₹)
A's capital A/c	Dr.		10,000	
To C's capital A/c				10,000
[being A should give the amt. of goodwill to C]				

W N-1 Cal^n of sacrificing ratio.

A = old - new

$= \frac{1}{3} - \frac{4}{9} = \frac{3-4}{9} = -\frac{1}{9}$ (gain)

B = old - new

$= \frac{1}{3} - \frac{3}{9} = \frac{3-3}{9} = 0$

C = old - new

$= \frac{1}{3} - \frac{2}{9} = \frac{3-2}{9} = \frac{1}{9}$ (loss)

W N-2 Cal^n of amt. of goodwill, A should give to C

$90,000 \times \frac{1}{9} = \underline{10,000}$

ill-8

Particulars	L F	Dr. (₹)	Cr. (₹)
B's capital A/C		1000	
To A's capital A/C			1000
[being B will give the amt of goodwill to A			

WN 1 cal^{n} of sacrifing ratio.

A = Old - new

$= \frac{4}{10} - \frac{7}{20} = \frac{8-7}{20} = \frac{1}{20}$ (loss)

B = old - new

$= \frac{3}{10} - \frac{7}{20} = \frac{6-7}{20} = -\frac{1}{20}$ (gain)

C = old - new

$= \frac{3}{10} - \frac{6}{20} = \frac{6-6}{20} = 0$

WN-2 cal^{n} of amt of goodwill, B should give to A

$20,000 \times \frac{1}{20} = \underline{1000}$

Ill-9

Particulars	L F	Dr. (₹)	Cr. (₹)
A's capital A/C		10,000	
B's capital A/C		10,000	
To C's capital A/C			10,000
To D's capital A/C			10,000
[being A and B will give amt. of goodwill to C and D]			

WN 1 Cal^{n} of sacrificing ratio.

A = Old - new = $\frac{1}{4} - \frac{3}{10}$ = 10/-1/12 = $\frac{5-6}{20}$ = $\frac{-1}{20}$ (gain)

B = Old - new = $\frac{1}{4} - \frac{3}{10}$ = $\frac{5-6}{20}$ = $-\frac{1}{20}$ (gain)

C = Old - new = $\frac{1}{4} - \frac{2}{10}$ = $\frac{5-4}{20}$ = $\frac{1}{20}$ (loss)

D = Old - new = $\frac{1}{4} - \frac{2}{10}$ = $\frac{5-4}{20}$ = $\frac{1}{20}$ (loss)

WN 2 Cal^{n} the amt of goodwill, A & B will give to C & D

A = 20,000 × $\frac{1}{20}$ = 10,000

B = 20,000 × $\frac{1}{20}$ = 10,000

Accounting Treatment of Goodwill in case of Retirement or Death of a partner

→ In case of Retirement of a partner, the continuing partner's will gain in terms of profit sharing ratio.

→ Therefore, Continuing partner have to pay to the retiring partner for his share of Goodwill in the gaining ratio.

ill-10

Profit :

2018 - 19	2,60,000
2019 - 20	2,75,000
2020 - 21	2,65,000
2021 - 22	2,80,000
	10,80,000

• Int Avg profit	2,70,000 (10,80,000 x 1/4)
- Int. on capital	78,000
- remuneration	72,000
Avg. profit	1,20,000

Goodwill = Avg. profit x No. of year purchase

= 1,20,000 x 3

= 3,60,000

Antoo's share = $3,60,000 \times \frac{3}{10} = 1,08,000$

Particulars		L F	Dr. (₹)	Cr. (₹)
Bantoo's capital A/C	Dr.		36,000	
Chintoo's capital A/C	Dr.		72,000	
To Antoo's capital A/C				1,08,000
(being share of goodwill of Antoo by continuing partner's capital in gaining ratio)				

Date
Page

WN 1 cal^{n} of gaining ratio.

Antoo = new share - old weshare

$= 0 - \frac{3}{10}$

$= \boxed{\frac{-3}{10}}$ (loss)

Bantoo = new share - old share

$= \frac{1}{2} - \frac{4}{10}$

$= \frac{5-4}{10} = \boxed{\frac{1}{10}}$ (gain)

Chintoo = New share - old share

$= \frac{1}{2} - \frac{3}{10}$

$= \frac{5-3}{10} = \boxed{\frac{2}{10}}$ (gain)

ill-11

	2018-19	2019-20	2020-21	2021-22
Profit	2,10,000	2,60,000	2,10,000	3,05,000
(-) Salary of CA	(24,000)	(24,000)	(30,000)	(36,000)
(-) Int on partner's capital (4,00,000 + 3,00,000) × 8%	(56,000)	(56,000)	(56,000)	(56,000)
+ Machinery pur. wrongly charge to P&L A/C	-	-	40,000	-
(-) Depⁿ on Machinery (40,000 × 20% × 6/12) [(40,000 - 4000) × 20%]	-	-	(4000)	(7200)
(-) over valuation of cls. stock	-	(20,000)	-	-
+ over valuation of op. stock	-	-	20,000	-
+ loss by fire (Abnormal ~~profit~~ items)	10,000	-	-	-
- pr				~~(5800)~~
- provision for Bad debt	-	-	-	(5800)

* We are calⁿ the Normal Adj. profit i.e. After Adjusting Abnormal items

Normal Adj. Profit	weight	Product
1,40,000	1	1,40,000
1,60,000	2	3,20,000
1,80,000	3	5,40,000
2,00,000	4	8,00,000
	10	18,00,000

Weighted Avg. profit = $\frac{18,00,000}{10}$

= **1,80,000**

Good will = Avg profit x No. of years purchase

= 1,80,000 x 3

= **5,40,000**

Ag's share = 5,40,000 x $\frac{1}{4}$ = 1,35,000

Particulars	L F	Dr. (₹)	Cr. (₹)
Cash / Bank A/C Dr.		1,35,000	
To Cy's capital A/C			67,500
To Az's capital A/C			67,500
[being Amt. brought by Ag as goodwill]			

WN 1 cal^{n} of sacrificing ratio

Cu = Old share − New share

$= \frac{5}{8} - \frac{2}{4}$ (2)

$= \frac{1}{8}$

Au $= \frac{3}{8} - \frac{1}{4}$

$= \frac{1}{8}$

Ag $= \frac{1}{4}$

III Practical Questions

1.

Cal^{n} of the value of goodwill

Year ending 30th June - 2020		
1/2 of 2019 profit	33,600	
1/2 of 2020 profit	37,800	71,400
Year ending 30th June - 2021		
1/2 of 2020 profit	37,800	
1/2 of 2021 profit	36,000	73,800
Year ending 30th June - 2022		
1/2 of 2021 profit	36,000	
1/2 of 2022 profit	31,200	67,200
		2,12,400

Average profit = $\frac{2,12,400}{3}$ = 70,800

Avg. profit	70,800
(-) 8% capital Interest	2,12,480
(-) Remuneration (15000 x 3)	45,000
Avg. profit (Adj.)	13,320

Goodwill = 13,320 x 3

= 39,960

Wise's share = $39,960 \times \frac{4}{10}$

= 15984

Particulars		L/F	Dr. (₹)	Cr. (₹)
Clever's capital A/C	Dr.		7,992	
Dull's capital A/C	Dr.		7,992	
To Wise's capital A/C				15,984
[being existing partners will give the amt. of goodwill to wise]				

WN1 cal^{n} of gaining ratio.

Wise = New share - old share

$= 0 - \frac{4}{10} = \boxed{-\frac{4}{10}}$ (loss)

Clever = New share - old share

$= \frac{1}{2} - \frac{3}{10} = \frac{5-3}{10} = \boxed{\frac{2}{10}}$ (gain)

Dull = New share - old share

$= \frac{1}{2} - \frac{3}{10} = \frac{5-3}{10} = \boxed{\frac{2}{10}}$ (gain)