Chapter 3- Goodwill- Nature and Valuation

Question 1

Goodwill is to be valued at three years' purchase of four years' average profit. Profits for the last four years ending on 31st March of the firm were: 2016 − ₹ 12,000; 2017 − ₹ 18,000; 2018 − ₹ 16,000; 2019 − ₹ 14,000. Calculate the amount of Goodwill.

Solution:

Goodwill = Average Profit x Total years' purchase

$$\text{Average Profit} = \frac{\text{Total Profits for past given years}}{\text{Number of Years}}$$

$$= \frac{12,000 + 18,000 + 16,000 + 14,000}{4} = \frac{60,000}{4} = ₹15,000$$

Numbers of Year's Purchased = 3

So, Goodwill = 15,000 X 3 = ₹45,000

Question 2

The profit for the five years ending on 31st March, are as follows:

Year 2014−₹ 4,00,000 Year 2015−₹ 3,98,000; Year 2016−₹ 4,50,000; Year 2017−₹ 4,45,000; Year 2018−₹ 5,00,000.

Calculate goodwill of the firm on the basis of 4 years' purchase of 5 years' average profit.

Solution:

Goodwill = Average Profit x Total years' purchase

$$\text{Average Profit} = \frac{\text{Total profits for past given years}}{\text{Number of years}}$$

$$= \frac{4,00,000 + 3,98,000 + 4,50,000 + 4,45,000 + 5,00,000}{5} = \frac{21,93,00}{5} = ₹ 4,38,600$$

Total Year's Purchase = 3

So, Goodwill = 4,38,600 X 4 = ₹ 17,54,400

Question 3

Calculate value of goodwill on the basis of three years' purchase of average profit of the preceding five years which were as follows:

Year	2017−18	2016−17	2015−16	2014−15	2013−14
Profits (₹)	8,00,000	15,00,000	18,00,000	4,00,000 (Loss)	13,00,000

Solution:

Goodwill = Average Profit x Total years' purchase

$$\text{Average Profit} = \frac{\text{Total Profits for past given years}}{\text{Number of Years}}$$

$$= \frac{8,00,000 + 15,00,000 + 18,00,000 - 4,45,000 + 513,00,000}{5} = \frac{51,00,000}{5} = ₹ 10,00,000$$

Numbers of Year's Purchased = 3

So, Goodwill = 10,00,000 X 3 = ₹ 30,00,000

Question 4

Calculate the value of firm's goodwill on the basis of one and half years' purchase of the average profit of the last three years. The profit for first year was ₹ 1,00,000, profit for the second year was twice the profit of the first year and for the third year profit was one and half times of the profit of the second year.

Solution:

Goodwill = Average Profit × No. of years' purchase

= 2,00,000 × 1.5 = ₹ 3,00,000

Working Notes 1: Evaluation of last three years profit

Year	Profit
1st Year	1,00,000
2nd Year	2,00,000 (1,00,000 X 2)
3rd Year	3,00,000 (2,00,000X 1.5)
Total Profit	6,00,000

Working Notes 1: Average Profit Evaluation

$$\text{Average Profit} = \frac{\text{Total Profits for past given years}}{\text{Number of Years}}$$

$$= \frac{6,00,000}{3} = \text{Rs } 2,00,000$$

Question 5

Purav and Purvi are partners in a firm sharing profits and losses in the ratio of 2:1. They decided to take Parv into a partnership for 1/4th share on 1st April, 2019. For this purpose, goodwill is to be valued at four times the average annual profit of the previous four or five years, whichever is higher. They agreed on profits for goodwill purpose of the past five years are:

Year	2014-15	2015-16	2016-17	2017-18	2018-19
Profita ₹	14,000	15,500	10,000	16,000	15,000

Solution:

Evaluation of Goodwill:

Goodwill = Average Profit × No. of years' purchase

= 14,125 x 4 = ₹56,500

Working Notes 1: Five Years' Average Profit Evaluation

Year	Profit
2014-15	14,000
2015-16	15,500
2016-17	10,000
2017-18	16,000
2018-19	15,000

| Total Profit | 70,500 |

Five Years' Average Profit = 70,500/15 = ₹14,100

Working Notes 2: Four Years' Average Profit Evaluation

Year	Profit
2015-16	15,500
2016-17	10,000
2017-18	16,000
2018-19	15,000
Total Profit	56,500

Four Years' Average Profit Evaluation = 56,500/4 = ₹ 14,125

So, Four Years' Average Profits > Five Years' Average Profits

Accordingly, for Goodwill Valuation, Average profits = ₹ 14,125

Question 6

Annu, Baby and Chetan are partners in a firm sharing profits and losses equally. They decide to take Deep into partnership from 1st April, 2019 for 1/5th share in the future profits. For this purpose, goodwill is to be valued at 100% of the average annual profits of the previous three or four years, whichever is higher. The annual profits for the purpose of goodwill for the past four years were:

Year Ended	Profit (₹)
31st March, 2019	2,88,000
31st March, 2018	1,81,800
31st March, 2017	1,87,200
31st March, 2016	2,53,200

Calculate the value of goodwill.

Solution:

Three Years' Average Profits = 2,88,000+1,81,8000+1,87,200 / 3

= 6,57,000/3 = ₹2,19,000

Four Years' Average Profits **=** 2,88,000+1,81,800+1,87,200+2,53,200 / 4 = ₹2,19,000

= 9,10,200/4 = ₹2,27,550

Since, the Four Years' Average Profits > Three Years' Average Profits. The goodwill will be 100% average profits of previous four years = ₹ 2,27,550

Question 7

Divya purchased Jyoti's business with effect from 1st April, 2019. Profits shown by Jyoti's business for the last three financial years were:

2016-17	:	₹ 1,00,000 (including an abnormal gain of ₹ 12,500).
2017-	:	₹ 1,25,000 (after charging an abnormal loss of ₹ 25,000).

18		
2018-19	:	₹ 1,12,500 (excluding ₹ 12,500 as insurance premium on the firm's property- now to be insured).

Calculate the value of a firm's goodwill on the basis of two year's purchase of the average profit of the last three years.

Solution:

Year 2016-17 normal profit = (Total Profit (1,00,000) – (12,500) Abnormal Gain)= ₹ 87,500

Year 2017-18 normal profit = (Total Profit (1,25,000) – (25,000) Abnormal Gain)= ₹ 1,50,000

Year 2018-19 normal profit = (Total Profit (1,12,500) – (12,500) Unrecorded Expenses)= ₹ 1,00,000

$$\text{Average Profits=} \frac{2016-17\ normal\ profit + 2017-18\ normal\ profit + 2018-19\ normal\ profit}{3}$$

$$\text{Average Profits=} \frac{87,500+1,50,000+1,00,000}{3} = ₹\ 1,12,500$$

Average Profits=87,500+1,50,000+1,00,0003= ₹ 1,12,500

Goodwill=Average Profits of last three years × No. of years of Purchase

= 1,12,500 × 2 = ₹ 2,25,000

Question 8

Abhay, Babu and Charu are partners sharing profits and losses equally. They agree to admit Daman for an equal share of profit. For this purpose, the value of goodwill is to be calculated on the basis of four years' purchase of the average profit of the last five years. These profits for the year ended 31st March, were:

Year	2015	2016	2017	2018	2019
Profit/(Loss) (₹)	1,50,000	3,50,000	5,00,000	7,10,000	(5,90,000)

On 1st April, 2018, a car costing ₹ 1,00,000 was purchased and debited to Travelling Expenses Account, on which depreciation is to be charged @ 25%. The interest of ₹ 10,000 on Non-trade Investments is a credit to income for the year ended 31st March, 2018 and 2019.

Calculate the value of goodwill after adjusting the above.

Solution:

Goodwill = Average Profit × No. of years' Purchased

Normal Profit Evaluation

Years	2015	2016	2017	2018	2019
Profit /(Loss)	1,50,000	3,50,000	5,00,000	7,10,000	(5,90,000)
Adjustments:	–	–	–	–	1,00,000
Travelling Expenses	–	–	–	–	(25,000)
Depreciation	–	–	–	(10,000)	(10,000)

Interest					
Normal Profit		1,50,000	3,50,000	5,00,000	7,00,000	(5,25,000)

Normal Average Profit = Last Five Years' Normal Profit / 3

= 11,75,000/5 = ₹ 2,35,000

Goodwill= Average Profits for last 5 years x No. of years of purchase

Therefore, Goodwill = 2,35,000 X 4 = ₹.9,40,000

Question 9

Bharat and Bhushan are partners sharing profits in the ratio of 3 : 2. They decided to admit Manu as a partner from 1st April, 2019 on the following terms:

(i) Manu will be given 2/5th share of the profit.

(ii) Goodwill of the firm will be valued at two years' purchase of three years' normal average profit of the firm.

Profits of the previous three years ended 31st March, were:

2019 – Profit ₹ 30,000 (after debiting loss of stock by fire ₹ 40,000).

2018 – Loss ₹ 80,000 (includes voluntary retirement compensation paid ₹ 1,10,000).

2017 – Profit ₹ 1,10,000 (including a gain (profit) of ₹ 30,000 on the sale of fixed assets).

Calculate the value of goodwill.

Solution:

Normal Profit Evaluation

Year	Actual Profit	+	Abnormal Loss Non-Recurring	–	Abnormal Gain Non-Recurring	=	Normal Profit
2019	30,000	+	40,000	–	Nil	=	70,000
2018	(80,000)	+	1,10,00	–	Nil	=	30,000
2017	1,10,000	+	Nil	–	30,000	=	80,000
Three Years' Normal Profit						=	1,80,000

Normal Average Profit = Last Three Years' Normal Profit / 3

Normal Average Profit = 1,80,000/3 = ₹ 60,000

No. of years' purchase = 2

Goodwill = Normal Average Profit × No. of years' purchase

Goodwill = 60,000 X 2 = ₹ 1,20,000

Question 10

Bhaskar and Pillai are partners sharing profits and losses in the ratio of 3 : 2. They admit Kanika into a partnership for 1/4th share in profit. Kanika brings in her share of goodwill in cash. Goodwill for this purpose is to be calculated at two years' purchase of the average normal profit of the past three years. Profits of the last three years ended 31st March, were:

2017 – Profit ₹ 50,000 (including profit on the sale of assets ₹ 5,000).

2018 – Loss ₹ 20,000 (including loss by fire ₹ 30,000).

2019 – Profit ₹ 70,000 (including insurance claim received ₹ 18,000 and interest on investments and Dividend received ₹ 8,000).

Calculate the value of goodwill. Also, calculate goodwill brought in by Kanika.

Solution:

Normal Profit Evaluation

Year	Actual Profit	+	Abnormal Loss Non-Recurring	–	Abnormal Gain Non-Recurring	=	Normal Profit
2017	50,000	+	Nil	–	5,000	=	45,000
2018	(20,000)	+	30,000	–	Nil	=	10,000
2019	70,000	+	Nil	–	18,000 + 8,000	=	44,000
Normal Profits for last 3 years							99,000

Normal Average Profit = Three Years' Normal Profit / 3

Normal Average Profit = 99,000/3 = ₹ 33,000

No. of years' purchase = 2

Goodwill = Normal Average Profit × No. of years' purchase

Goodwill = 33,000 X 2 = ₹ 66,000

Goodwill share of Z = Firm Goodwill X Z's Profit Share

= 66,000 X 1/4 = ₹ 16,500

Question 11

Sumit purchased Amit's business on 1st April, 2019. Goodwill was decided to be valued at two years' purchase of the average normal profit of the last four years. The profits for the past four years were:

Year Ended	31st March, 2016	31st March, 2017	31st March, 2018	31st March, 2019
Profits (₹)	80,000	1,45,000	1,60,000	2,00,000

Books of Account revealed that:

(i) Abnormal loss of ₹ 20,000 was debited to Profit and Loss Account for the year ended 31st March, 2016.

(ii) A fixed asset was sold in the year ended 31st March, 2017 and gain (profit) of ₹ 25,000 was credited to Profit and Loss Account.

(iii) In the year ended 31st March, 2018 assets of the firm were not insured due to oversight. Insurance premium not paid was ₹ 15,000.

Calculate the value of goodwill.

Solution:

Normal Profits Evaluation

Year	Profit/(Loss) ₹	Adjustment	Normal Profit ₹
March 31st, 2016	80,000	20,000	1,00,000
March 31st, 2017	1,45,000	(25,000)	1,20,000
March 31st, 2018	1,60,000	(15,000)	1,45,000
March 31st, 2019	2,00,000	–	2,00,000
			5,65,000

Average Profit=Total Profits for past given years / Number of Years

= 5,65,000/4 = ₹ 1,41,250

Goodwill = Average Profit × No. of years' purchase

=1,41,250 × 2= ₹ 2,82,500

Question 12

Geet and Meet are partners in a firm. They admit Jeet into a partnership for an equal share. It was agreed that goodwill will be valued at three years' purchase of the average profit of the last five years. Profits for the last five years were:

Year Ended	31st March, 2015	31st March, 2016	31st March, 2017	31st March, 2018	31st March, 2019
Profits (₹)	90,000 (Loss)	1,60,000	1,50,000	65,000	1,77,000

Books of Account of the firm revealed that:

(i) The firm had a gain (profit) of ₹ 50,000 from the sale of machinery sold in the year ended 31st March, 2016. The gain (profit) was credited in Profit and Loss Account.

(ii) There was an abnormal loss of ₹ 20,000 incurred in the year ended 31st March, 2017 because of a machine becoming obsolete in an accident.

(iii) Overhauling the cost of second-hand machinery purchased on 1st July, 2017 amounting to ₹ 1,00,000 was debited to the Repairs Account. Depreciation is charged @ 20% p.a. on Written Down Value Method.

Calculate the value of goodwill.

Solution:

Particulars	Year	31st March, 2015	31st March, 2016	31st March, 2017	31st March, 2018	31st March, 2019
Profit/Loss		(90,000)	1,60,000	1,50,000	65,000	1,77,000
Less: Gain on Sale of Machinery			50,000			
Add: Abnormal Loss				20,000		

Add: Existing machinery Overhaul					
Debited to Repairs A/c				1,00,000	
Less: @20% p.a. Depreciation				15,000	17,000
Normal Profit/Loss	(90,000)	1,10,000	1,70,000	1,50,000	1,60,000

$$\text{Average Profits} = \left(\frac{\text{Normal profits from the year ended 31st March,2015 to 31st March,2019}}{5}\right)$$

$$= \left(\frac{-90,000 + 1,00,000 + 1,70,000 + 1,50,000 + 1,60,000}{5}\right) = ₹\,1,00,000$$

Goodwill = Average profits of the last 5 years x No. of years' of Purchase

= ₹ 1,00,000 X 3 = ₹ 3,00,000

Question 13

Profits of a firm for the year ended 31st March for the last five years were:

Year Ended	31st March, 2015	31st March, 2016	31st March, 2017	31st March, 2018	31st March, 2019
Profits ₹	20,000	24,000	30,000	25,000	18,000

Calculate the value of goodwill on the basis of three years' purchase of Weighted Average Profit after assigning weights 1, 2, 3, 4 and 5 respectively to the profits for years ended 31st March, 2015, 2016, 2017, 2018 and 2019.

Solution:

Year	Profit	×	Weight	=	Product
2015	20,000	×	1	=	20,000
2016	24,000	×	2	=	48,000
2017	30,000	×	3	=	90,000
2018	25,000	×	4	=	1,00,000
2019	18,000	×	5	=	90,000
Total			15		3,48,000

Weighted Average Profit = Total Product Profit / Total of Weight

= 3,48,000/15 = ₹ 23,200

Goodwill = Weighted Average Profit x No. of years' of Purchase

= 23,200 X 3 = ₹ 69,600

Question 14

A and B are partners sharing profits and losses in the ratio of 5 : 3. On 1st April, 2019, C is admitted to the partnership for 1/4th share of profits. For this purpose, goodwill is to be valued at two years' purchase of the last three years' profits (after allowing partners' remuneration). Profits to be weighted 1 : 2 : 3, the greatest weight being given to last year. Net profit before partners' remuneration were: 2016-17 : ₹ 2,00,000; 2017-18 : ₹ 2,30,000; 2018-19 : ₹ 2,50,000. The remuneration of the partners is estimated to be ₹ 90,000 p.a. Calculate the amount of goodwill.

Solution:

Year	Profit before Partners' Remuneration	−	Partners' Remuneration	=	Profit after Partners' Remuneration
2016-17	2,00,000	−	90,000	=	1,10,000
2017-18	2,30,000	−	90,000	=	1,40,000
2018-19	2,50,000	−	90,000	=	1,60,000

Year	Profit	×	Weight	=	Product
2016-17	1,10,000	×	1	=	1,10,000
2017-18	1,40,000	×	2	=	2,80,000
2018-19	1,60,000	×	3	=	4,80,000
	Total		6		8,70,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 8,70,000/6 = ₹ 1,45,000

Goodwill = Weighted Average Profit x No. of years' of Purchase

= 1,45,000 X 2 = ₹ 2,90,000

Question 15

Raman and Daman are partners sharing profits in the ratio of 60 : 40 and for the last four years, they have been getting annual salaries of ₹ 50,000 and ₹ 40,000 respectively. The annual accounts have shown the following net profit before charging partners' salaries:

Year ended 31st March, 2017 − ₹ 1,40,000; 2018 − ₹ 1,01,000 and 2019 − ₹ 1,30,000.

On 1st April, 2019, Zeenu is admitted to the partnership for 1/4th share in profit (without any salary). Goodwill is to be valued at four years' purchase of weighted average profit of last three years (after partners' salaries); Profits to be weighted as 1 : 2 : 3, the greatest weight being given to the last year. Calculate the value of Goodwill.

Solution:

Year	Profits before charging Salary ₹	Profits after charging Salary ₹	Weights	Weighted Profits ₹
March 31st, 2017	1,40,000	1,40,000- 90,000= 50,000	1	50,000
March 31st, 2018	1,01,000	1,01,000- 90,000= 11,000	2	22,000
March 31st, 2019	1,30,000	1,30,000- 90,000= 40,000	3	1,20,000
Total			6	1,92,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 1,92,000/6 = ₹ 32,000

Goodwill = Weighted Average Profit x No. of years' of Purchase

= 32,000 X 4 = ₹ 1,28,000

Question 16

Calculate the goodwill of a firm on the basis of three years' purchase of the Weighted Average Profit of the last four years. The profits of the last four financial years ended 31st March, were: 2016 − ₹ 25,000; 2017 − ₹ 27,000; 2018 − ₹ 46,900 and 2019 − ₹ 53,810. The weights assigned to each year are 2016 − 1; 2017 − 2; 2018 − 3; 2019 − 4. You are supplied the following information:

(i) On 1st April, 2016, a major plant repair was undertaken for ₹ 10,000 which was charged to revenue. The said sum is to be capitalised for goodwill calculation subject to adjustment of depreciation of 10% on Reducing Balance Method.

(ii) The Closing Stock for the years ended 31st March, 2017 and 2018 were overvalued by ₹ 1,000 and ₹ 2,000 respectively.

(iii) To cover management costs an annual charge of ₹ 5,000 should be made for the purpose of goodwill valuation.

Solution:

Particulars	Year	March 31st, 2016	March 31st, 2017	March 31st, 2018	March 31st, 2019
Profit		25,000	27,000	46,900	53,810
Add: Plant repair			10,000		
Less: Depreciation @10% W.D.V			1,000	900	810
Less: Closing Stock Overvaluation			1,000	2,000	
Add: Opening Stock Overvaluation				1,000	2,000
Less: Annual Charge		5,000	5,000	5,000	5,000
Normal Profit/Loss		20,000	30,000	40,000	50,000

Year	Normal Profits ₹	Weights	Weighted Profits ₹
31st March, 2016	20,000	1	20,000
31st March, 2017	30,000	2	60,000
31st March, 2018	40,000	3	1,20,000
31st March, 2019	50,000	4	2,00,000
Total		10	4,00,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 4,00,000/10 = ₹ 40,000

Goodwill = Weighted Average Profit x No. of years' of Purchase

= 40,000 X 3 = ₹ 1,20,000

Question 17

Dinesh and Mahesh are partners sharing profits and losses in the ratio of 3 : 2. They admit Ramesh into partnership for 1/4th share in profits. Ramesh brings in his share of goodwill in cash. Goodwill for this purpose shall be calculated at two years' purchase of the weighted average normal profit of past three years. Weights being assigned to each year 2017−1; 2018−2 and 2019−3. Profits of the last three years were:

2017 − Profit ₹ 50,000 (including profits on sale of assets ₹ 5,000).

2018 − Loss ₹ 20,000 (including loss by fire ₹ 35,000).

2019 − Profit ₹ 70,000 (including insurance claim received ₹ 18,000 and interest on investments and dividend received ₹ 8,000).

Calculate the value of goodwill. Also, calculate the goodwill brought in by Ramesh.

Solution:

2017 Normal Profits = (Total Profits (50,000) − (5,000) Profit on Sale of Assets) = ₹ 45,000

2018 Normal Profits = (Loss by Fire (35,000) − (20,000) Total Loss) = ₹ 15,000

2019 Normal Profits = (Total Profit (70,000) − (18,000) Insurance Claim Received − (8,000) Dividend) = ₹ 44,000

Year	Normal Profits ₹	Weights	Weighted Profits ₹
2017	45,000	1	45,000
2018	15,000	2	30,000
2019	44,000	3	1,32,000
Total		6	2,07,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 2,07,000/6 = ₹ 34,500

Goodwill = Weighted Average Profit x No. of years' of Purchase

= 34,500 X 2 = ₹ 69,000

Ramesh's Share of Goodwill=₹(69,000 x 1/4) = ₹ 17,250

Question 18

Manbir and Nimrat are partners and they admit Anahat into partnership. It was agreed to value goodwill at three years' purchase on Weighted Average Profit Method taking profits of the last five years. Weights assigned to each year as 1, 2, 3, 4 and 5 respectively to profits for the year ended 31st March, 2015 to 2019. The profits for these years were: ₹ 70,000, ₹ 1,40,000, ₹ 1,00,000, ₹ 1,60,000 and ₹ 1,65,000 respectively.

Scrutiny of books of account revealed following information:

(i) There was an abnormal loss of ₹ 20,000 in the year ended 31st March, 2015.

(ii) There was an abnormal gain (profit) of ₹ 30,000 in the year ended 31st March, 2016.

(iii) Closing Stock as on 31st March, 2018 was overvalued by ₹ 10,000.

Calculate the value of goodwill.

Solution:

Goodwill = Weighted Average Profit × No. of years' Purchase

= 1,39,000 × 3 = ₹ 4,17,000

Working Notes 1: Normal Profit Evaluation

Year	Profit/(Loss) ₹	Adjustment	Normal Profit ₹
March 31st, 2015	70,000	20,000	90,000
March 31st, 2016	1,40,000	(30,000)	1,10,000
March 31st, 2017	1,00,000	–	1,00,000
March 31st, 2018	1,60,000	(10,000)	1,50,000
March 31st, 2019	1,65,000	10,000	1,75,000

Working Notes 1: Weighted Average Profits Evaluation

Year	Normal Profit	Weight	Product
March 31st, 2015	90,000	1	90,000
March 31st, 2016	1,10,000	2	2,20,000
March 31st, 2017	1,00,000	3	3,00,000
March 31st, 2018	1,50,000	4	6,00,000
March 31st, 2019	1,75,000	5	8,75,000
Total		15	20,85,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 20,85,000/15 = ₹ 1,39,000

Question 19

Mahesh and Suresh are partners and they admit Naresh into partnership. They agreed to value goodwill at three years' purchase on Weighted Average Profit Method taking profits for the last five years. They assigned weights from 1 to 5 beginning from the earliest year and onwards. The profits for the last five years were as follows:

Year Ended	31st March, 2015	31st March, 2016	31st March, 2017	31st March, 2018	31st March, 2019
Profits (₹)	1,25,000	1,40,000	1,20,000	55,000	2,57,000

Scrutiny of books of account revealed the following:

(i) A second-hand machine was purchased for ₹ 5,00,000 on 1st July, 2017 and ₹ 1,00,000 was spent to make it operational. ₹ 1,00,000 were wrongly debited to the Repairs Account. Machinery is depreciated @ 20% p.a. on Written Down Value Method.

(ii) Closing Stock as on 31st March, 2018 was undervalued by ₹ 50,000.

(iii) Remuneration to partners was to be considered as charge against profit and remuneration of ₹ 20,000 p.a. for each partner was considered appropriate.

Calculate the value of goodwill.

Solution:

Particulars	Year	31st March	31st March	31st March	31st March	31st March

	2015 ₹	2016 ₹	2017 ₹	2018 ₹	2019 ₹
Profit	1,25,000	1,40,000	1,20,000	55,000	2,57,000
Add: New machine repairs				1,00,000	
Less: Depreciation				15,000	17,000
Add: Undervaluation of Closing Stock				50,000	
Less: Undervaluation of Opening Stock					50,000
Less: Partners Remuneration	40,000	40,000	40,000	40,000	40,000
Normal Profit/Loss	85,000	1,00,000	80,000	1,50,000	1,50,000

Year	Normal Profits ₹	Weights	Weighted Profits ₹
31st March, 2015	85,000	1	85,000
31st March, 2016	1,00,000	2	2,00,000
31st March, 2017	80,000	3	2,40,000
31st March, 2018	1,50,000	4	6,00,000
31st March, 2019	1,50,000	5	7,50,000
Total		15	18,75,000

Weighted Average Profit = Weighted Average Profit = Total Product Profit / Total of Weight

= 18,75,000/15 = ₹ 1,25,000

Goodwill=Weighted Average Profits × No. of years of purchase

= ₹ 1,25,000 x 3 = ₹ 3,75,000

Question 20

Calculate the goodwill of a firm on the basis of three years' purchase of the weighted average profit of the last four years. The appropriate weights to be used and profits are:

Year	2015-16	2016-17	2017-18	2018-19
Profits (₹)	1,01,000	1,24,000	1,00,000	1,40,000
Weights	1	2	3	4

On a scrutiny of the accounts, the following matters are revealed:

(i) On 1st December, 2017, a major repair was made in respect of the plant incurring ₹ 30,000 which was charged to revenue. The said sum is agreed to be capitalised for goodwill calculation subject to adjustment of depreciation of 10% p.a. on Reducing Balance Method.

(ii) The closing stock for the year 2016-17 was overvalued by ₹ 12,000.

(iii) To cover management cost, an annual charge of ₹ 24,000 should be made for the purpose of goodwill valuation.

(iv) On 1st April, 2016, a machine having a book value of ₹ 10,000 was sold for ₹ 11,000 but the proceeds were

Solution:

Particulars	2015-16	2016-17	2017-18	2018-19
Profits	1,01,000	1,24,000	1,00,000	1,40,000
Repair Capitalised			+30,000	
Depreciation			(1,000)	(2,900)
Overvaluation Closing Stock		(12,000)	12,000	
Management Cost	(24,000)	(24,000)	(24,000)	(24,000)
Sale Proceeds		(10,000)		
Wrong Depreciation			900	810
Adjusted Profits	77,000	78,000	1,17,900	1,13,910
Weights	1	2	3	4
Product	77,000	1,56,0000	3,53,700	4,55,640

Working Notes:

Weighted Average Profit = Total Product Profit / Total of Weight

= 77,000+1,56,0000+1,56,0000+4,55,640 / 10

= ₹ 1,04,234

Goodwill=Weighted Average Profits × No. of years of purchase

= ₹ 1,04,234 x 3 = ₹ 3,12,702

Note: Sale wrongly credited in 2015-16 is deducted after adjusting ₹ 1,000 profit.

Question 21

Average profit earned by a firm is ₹ 80,000 which includes undervaluation of stock of ₹ 8,000 on an average basis. The capital invested in the business is ₹ 8,00,000 and the normal rate of return is 8%. Calculate goodwill of the firm on the basis of 7 times the super profit.

Solution:

Average Normal Profits =(Average Profits (80,000) + (8,000)Undervaluation of Stock)= ₹ 88,000

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (8,00,000 × 8/100 = ₹ 64,000

Super Profits= Average Profits (88,000)− (64,000) Normal Profits= ₹ 24,000

Goodwill= Super Profits × No. of years of Purchase

=₹24,000 x 7 = ₹ 1,68,000

Question 22

Gupta and Bose had a firm in which they had invested ₹ 50,000. On average, the profits were ₹ 16,000. The normal rate of return in the industry is 15%. Goodwill is to be valued at four years' purchase of profits in excess of profits @ 15% on the money invested. Calculate the value of goodwill.

Solution:

Goodwill= Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (50,000× 15/100 = ₹ 7,500

Actual Profit = ₹ 16,000

Super Profit = Actual Profit – Normal Profit

16,000 – 7,500 = ₹ 8,500

Total years' purchase = 4

Goodwill= 8,500 X 4 = ₹ 34,000

Question 23

The total capital of the firm of Sakshi, Mehak and Megha is ₹ 1,00,000 and the market rate of interest is 15%. The net profits for the last 3 years were ₹ 30,000; ₹ 36,000 and ₹ 42,000. Goodwill is to be valued at 2 years' purchase of the last 3 years' super profits. Calculate the goodwill of the firm.

Solution:

Goodwill= Super Profits × No. of years of Purchase

Super Profit = Average Profit – Normal Profit

Average Profit = Total Product Profit / Total of Weight

= 30,000+36,000+42,000 / 3 = ₹ 36,000

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (1,00,000× 15/100 = ₹ 15,000

Super Profit = ₹ 36,000 – ₹ 15,000 = ₹ 21,000

Total years' purchase = 2

Goodwill= 21,000 X 2 = ₹ 42,000

Question 24

Rakesh and Ashok earned a profit of ₹ 5,000. They employed the capital of ₹ 25,000 in the firm. It is expected that the normal rate of return is 15% of the capital. Calculate the amount of goodwill if goodwill is valued at three years' purchase of super profit.

Solution:

Actual Profits = ₹ 5,000

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (25,000 × 15/100 = ₹ 3,750

Super Profits = Actual Profits (5,000) − (3,750) Normal Profits = ₹1,250

Goodwill = Super Profits × No. of years of Purchase

No. of years of Purchase = 3

= ₹ 1,250 X 3 = ₹ 3,750

Question 25

Average net profit expected in future by XYZ firm is ₹ 36,000 per year. Average capital employed in the business by the firm is ₹ 2,00,000. The normal rate of return from capital invested in this class of business is 10%. Remuneration of the partners is estimated to be ₹ 6,000 p.a. Calculate the value of goodwill on the basis of two years' purchase of super profit.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (2,00,000 × 10/100 = ₹ 20,000

Expected Profit (Actual) = 36,000 – 20,000 = ₹ 10,000

Super Profits = Actual Profits (30,000) – (20,000) Normal Profits = ₹ 10,000

No. of years of Purchase = 2

Goodwill = 10,000 x 2 = ₹ 20,000

Question 26

A partnership firm earned net profits during the last three years ended 31st March, as follows:
2017 – ₹ 17,000; 2018 – ₹ 20,000; 2019 – ₹ 23,000.

The capital investment in the firm throughout the above-mentioned period has been ₹ 80,000. Having regard to the risk involved, 15% is considered to be a fair return on the capital. Calculate value of goodwill on the basis of two years' purchase of average super profit earned during the above-mentioned three years.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (80,000 × 15/100 = ₹ 12,000

Average Profit = Total Product Profit / Total of Weight

Average Actual Profit = 17,000 + 20,000 + 23,000 / 3

= 60,000/3 = ₹ 20,000

No. of years of Purchase = 2

Goodwill = 8,000 x 2 = ₹ 16,000

Question 27

A partnership firm earned net profits during the past three years as follows:

Year ended	31st March, 2019	31st March, 2018	31st March, 2017
Net Profit (₹)	2,30,000	2,00,000	1,70,000

Capital investment in the firm throughout the above-mentioned period has been ₹ 4,00,000. Having regard to the risk involved, 15% is considered to be a fair return on the capital. The remuneration of the partners during this period is estimated to be ₹ 1,00,000 p.a.

Calculate value of goodwill on the basis of two years' purchase of average super profit earned during the above-mentioned three years.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Normal Profits= (4,00,000 × 15/100 = ₹ 60,000

Year	Profit before Partners' Remuneration	−	Partners' Remuneration	=	Actual Profit after Remuneration
2017	1,70,000	−	1,00,000	=	70,000
2018	2,00,000	−	1,00,000	=	1,00,000
2019	2,30,000	−	1,00,000	=	1,30,000

Average Profit = Total Product Profit / Total of Weight

Average Actual Profit = 70,000 + 1,00,000 + 1,30,000 / 3

= 3,00,000 / 3 = ₹ 1,00,000

Super Profits = Actual Profits (1,00,000) − (60,000) Normal Profits = ₹ 40,000

No. of years of Purchase = 2

Goodwill = 40,000 x 2 = ₹ 80,000

Question 28

Ideal Marketing earned an average profit of ₹ 4,00,000 during the last five years. Normal rate of return on capital employed is 10%. Balance Sheet of the firm as at 31st March, 2019 was as follows:

Liabilities		₹	Assets	₹
Capital A/cs:			Land and Building	10,00,000
Shyam	5,00,000		Furniture	2,00,000
Sunder	5,00,000	10,00,000	Investments	1,00,000
Current A/cs:			Sundry Debtors	5,00,000
Shyam	2,00,000		Bills Receivable	50,000
Sunder	2,00,000	4,00,000	Closing Stock	3,00,000
Reserves		3,40,000	Cash in Hand	50,000
Sundry Creditors		4,00,000	Cash at Bank	1,00,000
Bills Payable		1,00,000		
Outstanding Expenses		60,000		
		23,00,000		23,00,000

Calculate the value of goodwill, if it is valued at three years' purchase of Super Profits.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Capital Employed = Total Assets − Non−Trade Investments− Outside Liabilities

= 23,00,000−1,00,000−5,60,000 = ₹ 16,40,000

Normal Profits= (16,40,000 × 10/100 = ₹ 1,64,000

Average Profits= ₹ 4,00,000

Super Profits=Average Profits (4,00,000) −(1,64,000)Normal Profits= ₹ 2,36,000

No. of years of Purchase = 3

Goodwill = 2,36,000 X 3 = ₹ 7,08,000

Question 29

Varuna and Karuna are partners for equal shares. They admit Lata into partnership for 1/4th share. It was agreed to value goodwill of the firm at 4 years' purchase of super profit. Normal rate of return is 15% of the capital employed. Average profit of the firm is ₹ 4,00,000. Balance Sheet of the firm as at 31st March, 2019 was as follows:

Liabilities		₹	Assets	₹
Capital A/cs:			Furniture	4,00,000
Varuna	5,00,000		Computers	3,00,000
Karuna	5,00,000	10,00,000	Electrical Fittings	1,00,000
Long-term Loan		5,50,000	Investments (Trade)	2,00,000
Sundry Creditors		2,00,000	Stock	3,00,000
Outstanding Expenses		50,000	Sundry Debtors	3,00,000
Advances from Customers		1,50,000	Bills Receivable	50,000
			Cash in Hand	50,000
			Cash at Bank	2,00,000
			Deferred Revenue Expenditure:	
			Advertisement Suspense	50,000
		19,50,000		19,50,000

Calculate the value of goodwill.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Capital Employed = Total Assets − Non−Trade Investments− Outside Liabilities

= 19,50,000−50,000−4,00,000 = ₹ 15,00,000

Normal Profits= (15,00,000 × 15/100 = ₹ 2,25,000

Average Profits= ₹ 4,00,000

Super Profits=Average Profits (4,00,000) −(2,25,000)Normal Profits= ₹ 1,75,000

No. of years of Purchase = 4

Goodwill = 1,75,000 X 4= ₹ 7,00,000

Question 30

A business earned an average profit of ₹ 8,00,000 during the last few years. The normal rate of profit in the similar type of business is 10%. The total value of assets and liabilities of the business were ₹ 22,00,000 and ₹ 5,60,000 respectively. Calculate the value of goodwill of the firm by super profit method if it is valued at 2 1/2% years' purchase of super profits.

Liabilities		₹	Assets	₹
Capital A/cs:			Furniture	4,00,000
Varuna	5,00,000		Computers	3,00,000
Karuna	5,00,000	10,00,000	Electrical Fittings	1,00,000
Long-term Loan		5,50,000	Investments (Trade)	2,00,000
Sundry Creditors		2,00,000	Stock	3,00,000
Outstanding Expenses		50,000	Sundry Debtors	3,00,000
Advances from Customers		1,50,000	Bills Receivable	50,000
			Cash in Hand	50,000
			Cash at Bank	2,00,000
			Deferred Revenue Expenditure:	
			Advertisement Suspense	50,000
		19,50,000		19,50,000

Calculate the value of goodwill.

Solution:

Goodwill = Super Profits × No. of years of Purchase

Normal Profits= (Capital Employed × Normal Rate of Income / 100

Capital Employed = Total Assets − Outside Liabilities

= 22,00,000 − 5,60,000 − 4,00,000 = ₹ 16,40,000

Normal Profits= (16,40,000 × 10/100 = ₹ 1,64,000

Average Profits= ₹ 8,00,000

Super Profits=Average Profits (8,00,000) −(1,64,000)Normal Profits= ₹ 6,36,000

No. of years of Purchase = 2.5

Goodwill = 6,36,000 X 2.5 = ₹ 15,90,000