

SYLLABUS

Unit – 1 Chapter 1: Valuation of Goodwill

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- Meaning of Goodwill
- Provision regarding Goodwill in various accounting standards
- Need for valuation of Goodwill
- Methods of valuation of Goodwill
 - Arbitrary Assessment
 - Average Profit Method (Simple average, Weighted average and Annuity method)
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 - Capitalization of profit method (Capitalization of Average profit and Super profit)

Unit – 2

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**** Notes:**

(1) Only Simple adjustments to be asked

(2) Income Statement OR Balance Sheet to be asked with relevant schedules. Combined question of final account is not accepted.

Unit – 4 Chapter 4: Liquidation of Company

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CHAPTER 1

Valuation of Goodwill

Introduction

- Goodwill is the value of prestige of the business. It is intangible and yet it can realize some price, if sold. A business which earns more than normal profit possesses goodwill. Goodwill is a valuable asset of business, and arises out of good name, reputation and connections of a business.
- Only the business earning more than normal profits has goodwill attached to it. It is the result of hard work, honesty and skill of the proprietors of the business. The business may be losing in beginning, but may be placed in an enviable position within few years by skill and efficiency of persons managing the business.

Definitions of Goodwill

- Many learned judges in their judgments, in a number of legal cases in respect of company management, have tried to define Goodwill. Some accountants tried their hands at defining goodwill these are as below:
- According to Lord Eldon, “Goodwill is nothing more than the probability that the old customers will resort to the old place.”
- In the words of Lord Macchaughten, “What is goodwill? It is a thing very easy to describe, very difficult to define. It is the benefit and advantage of the good name, reputation and connection of a business.

Characteristics of Goodwill

- **Depends on Earning Capacity**: If a business is able to earn more than normal profit, then only it has goodwill. Thus, goodwill depends on the earning capacity.
- **No goodwill, if not transferable**: If the profitability of business is due to the skill of some person, which cannot be transferred, the business has no goodwill, because the purchaser will not be able to earn extra profit. E.g., the goodwill of a doctor's dispensary will be nil.
- **Goodwill depends upon Future Super Profit**: The purchaser of business pays for the goodwill, because he expects to earn extra profit in future. So, if the business is expected to maintain its super profits, then only it will command goodwill. Hence, goodwill is calculated on the basis of Future Maintainable Profit.

Factors Affecting the Value of Goodwill

- Location of Business
- Length of Business
- Nature of Business
- Personal Skill
- Conditions of Business
- Proportion of Profit
- Patents & Trade Marks
- Conditions of Property and Terms of Purchase
- Requirement of Capital
- Government Restrictions
- Monopoly Condition
- Types of Customers
- Other Factors

When Valuation of Goodwill is Necessary

- When a business conducted by a sole proprietor is to be sold.
- In case of a partnership:
 - When a new partner is admitted into the firm.
 - When a partner retires or dies.
 - When the firm is dissolved and business is sold.
 - When the profit sharing ratio of partners is changed.
 - When two or more firms amalgamate.
- In case of a company:
 - When two or more companies amalgamate.
 - When one company is absorbed by another company.
 - When a holding company acquires a majority holding in another company.
- When the government or a local authority requisitions the business premises for public purposes.

Methods of Valuing Goodwill

The following methods are suggested by M/s Yorston, Smith and Brown for goodwill.

- ❖ Arbitrary Assessment
- ❖ Purchase of Past Profit
- ❖ Valuation based on Turnover
- ❖ Capitalization of Earnings
- ❖ Purchase of Super Profits
- ❖ Annuity Method

Valuation Based on Profit

(A) Simple Profit Method

- I. A certain number of years' purchase of Average Profit Method
- II. A certain number of years' purchase of Weighted Average Profit Method
- III. Capitalization of Average Profit Method
- IV. Annuity Method

(B) Super Profit Method

- I. A certain number of years' purchase of Super Profit Method
- II. Capitalization of Super Profit Method
- III. Annuity of Super Profit Method
- IV. Purchase of Super Profit on Sliding scale Method

Simple Profit Methods

I. **A certain number of years' purchase of average profit method:**

- A very simple method of valuing goodwill is to take a certain number of years' purchase of past profits. An average profit of the past three or five years is ascertained and it is multiplied by a certain number say, 3 or 5.
- The number of years over which the profits are averaged and the number of years' purchase applied, vary from one firm to another. The following guidelines may be useful in determining as to how many years' purchase should be selected:
 - Generally, the number of years that a new business would take to establish itself, would be taken as the number of years' purchase.
 - The goodwill of professional persons (e.g., Lawyer, Solicitors etc.) is taken at one or two years' purchase.
 - When the profits of the business are slowly declining, only one or two years' purchase is considered.
 - When the profit is progressively increasing, three to five years' purchase is taken.
 - While ascertaining average profits, non-trading income or expenditure and items of exceptional nature are not included.

- **Example:** A, B and C are partners in a firm. Goodwill should be calculated on the basis of three years' purchase of the average profit for the preceding five years. The profits and losses for the five years were as follows:

2015: Profit ₹ 20,000

2016: Profit ₹ 24,000

2017: Profit ₹ 26,000

2018: Loss ₹ 10,000

2019: Profit ₹ 30,000.

Calculate the amount of goodwill.

Solution: First we have to find average profit of last five years.

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No. of years}}$$

Here total profit of last five years:

$$20,000 + 24,000 + 26,000 - 10,000 + 30,000 = 90,000.$$

$$\text{So, Average Profit} = \frac{90,000}{5} = ₹ 18,000.$$

Now, Value of goodwill on the basis of 3 years' purchase of annual average profits:

$$\begin{aligned} \text{Goodwill} &= \text{Average Profit} \times \text{No. of years' of purchase} \\ &= ₹ 18,000 \times 3 = ₹ 54,000. \end{aligned}$$

Simple Profit Methods

II. A certain number of years' purchase of Weighted Average Profit Method:

- If the profits of the past few years are increasing or decreasing, it is better to take a weighted average of the profits.
- It means that the profit is constantly increasing and so it can be assumed that it will continue to increase in future also. Hence, more importance should be given to the last years' profit and less importance should be given to earlier years' profits. So weighted average should be taken.
- The weight to be given should be 1 for the first year's profit, 2 for the second year's profit, 3 for third year's profit and so on.

- **Example:** A, B and C are partners in a firm. Goodwill should be calculated on the basis of five years' purchase of the weighted average profit for the preceding four years. The profits of the last four years were as follows:

2016: Profit ₹ 30,000

2017: Profit ₹ 35,000

2018: Profit ₹ 42,000

2019: Profit ₹ 50,000

Calculate the amount of goodwill.

Solution: First we have to find out weighted average profit of last four years.

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, total Weighted profit and Weights of last four years:

Year	Profit	Weight	Weighted Profit
2016	30,000	1	30,000
2017	35,000	2	70,000
2018	42,000	3	1,26,000
2019	50,000	4	2,00,000
Total	-	10	4,26,000

$$\text{So, Weighted Average Profit} = \frac{4,26,000}{10} = ₹ 42,600.$$

Now, Value of goodwill on the basis of 5 years' purchase of weighted average profits:

$$\begin{aligned} \text{Goodwill} &= \text{Weighted Average Profit} \times \text{No. of years' of purchase} \\ &= ₹ 42,600 \times 5 = ₹ 2,13,000. \end{aligned}$$

Simple Profit Methods

III. Capitalization of Average Profits Method:

- **Average Profit:** The expected future profit is estimated. If any changes are expected in future in the profit earned, such changes are taken into consideration. Thus the first step is to estimate the future profits.
 - While estimating the future profits of the business the following factors must be taken into consideration:
 - The factors affecting the future net profit must be taken into account. E.g., if the proprietor of the business was managing the business so far, and if now the purchaser will have to pay remuneration for managing the business, it must be deducted from profit.
 - Income from non-trading investments must be deducted from the profit.
 - The trend of profit of last few years must be observed. If the profit is constantly increasing, then the weighted average profit must be calculated. Weight should be assigned to the profit of each year on the basis of its trend.

- **Capitalize profits at Expected Rate of Return:**

- To find out the capitalized value of profit at expected rate of return the following formula should be used.

- Capitalized profit = $\frac{\text{Adjusted Average Profit}}{\text{Expected Rate of Return (E.R.R)}} \times 100$

- **Capital Employed:** Now the amount of Capital Employed or Net Assets is found out.

Formula for finding out Net Assets of business is as follow.

- Capital Employed (Net Assets) = Total Assets – Total Liabilities

- **Goodwill:** The excess of the capitalized value over the net assets is the value of Goodwill.

- Goodwill = Capitalized value of profit – Net Assets

• **Steps for Calculating Goodwill by Capitalized of Average Profit:**

1. Find out Average Net Profit (including Adjustments)

2. Capitalization Profits at Expected Rate of Return

$$\text{Capitalized profit} = \frac{\text{Adjusted Average Profit}}{\text{Expected Rate of Return (E.R.R)}} \times 100$$

3. Net Assets = Total Assets – Total Liabilities

4. Goodwill = Capitalization of Net Profits – Net Assets

- **Example 2:** The following is the Balance Sheet of Dharti Ltd. as on 31-3-2012. Akash Ltd. wants to purchase its business.

Balance Sheet of Dharti Ltd.

Particulars	₹	Particulars	₹
Share Capital: 15,000 Equity Shares of ₹ 10 each	1,50,000	Land and Building	1,00,000
Creditors	30,000	Plant and Machinery	30,000
Provident Fund	10,000	Debtors	20,000
Bills Payable	10,000	Bills Receivable	10,000
		Stock	30,000
		Cash and Bank	10,000
	2,00,000		2,00,000

The profits of the company for the last five years are ₹ 24,000, ₹ 20,000, ₹ 32,000, ₹ 24,000 and ₹ 30,000 respectively. Manager of the company Shri Chandra was giving honorary service, but now a salary of ₹ 5,000 per annum will have to be paid to him. Dharti Ltd. pays ₹ 4,000 for office rent, which Akash Ltd. will not be required to pay.

The expected rate of return in this type of business is 10 per cent.

Calculate goodwill on the basis of capitalization of average profit method.

- **Solution:** Step – 1: Find out Average Profit (including adjustments):

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No.of years}}$$

Here, total profit of last five years:

$$24,000 + 20,000 + 32,000 + 24,000 + 30,000 = 1,30,000.$$

$$\text{So, Average Profit} = \frac{1,30,000}{5} = ₹ 26,000.$$

- Even if we assume that the annual average net profit will be maintained in future, the following adjustments will have to be made.

	₹
Average Profit	26,000
Add: Non- recurring rent	4,000
	<hr/>
	30,000
Less: Salary of Manager	5,000
	<hr/>
Adjusted Average Profit	<u><u>25,000</u></u>

Step – 2: Capitalization of profit at Expected Rate of Return:

$$\begin{aligned}\text{Capitalized profit} &= \frac{\text{Adjusted Average Profit}}{\text{Expected Rate of Return (E.R.R)}} \times 100 \\ &= \frac{25,000}{10} \times 100 = ₹ 2,50,000\end{aligned}$$

Step – 3: Find out Net Assets:

Net Assets = Total Assets – Total Liabilities

Total Assets	₹
Total of asset side	2,00,000
Less: Total Liabilities (Creditors, Provident Fund and Bills payable)	50,000
So, Net Assets	<hr/> 1,50,000

Step – 4: Goodwill = Capitalized profit – Net Assets

$$= 2,50,000 - 1,50,000$$

$$= \boxed{\text{₹ 1,00,000}}$$

Simple Profit Methods

IV. Annuity Method:

This method is only a variant of average profits method. When a purchaser of business pays a certain number of years' purchase of average profits as goodwill, he expects to receive back that amount in the form of extra profit during that period.

For example, if the profit is ₹ 50,000 and the goodwill is taken at 3 years' purchase of this figure of a firm, then the purchaser will pay ₹ 1,50,000 for goodwill. He then expects to recover this amount from business within 3 years. Here, he will receive ₹ 50,000 per year for three years in the form of extra profit; but he pays ₹ 1,50,000 at the time of purchase of business. Thus, he is losing heavily in the form of interest. He should not pay ₹ 1,50,000 for goodwill but he should pay only the "Present Value" of ₹ 1,50,000 paid annually in installment of ₹ 50,000 for 3 years at reasonable rate of interest.

- **Example 1:** In case of company, the net profit after charging taxation of last five years were as under: ₹ 48,000; ₹ 41,000; ₹ 44,000; ₹ 45,000 and ₹ 42,000.

The average capital employed has been ₹ 3,00,000. The normal rate of return is 10%. It is considered that the average profit will continue for the next five years.

The present value of annuity is ₹ 3.78. Assess the value of goodwill by using Annuity method.

- **Solution: Step – 1: Find out Average Profit:**

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No.of years}}$$

Here, total profit of last five years:

$$48,000 + 41,000 + 44,000 + 45,000 + 42,000 = 2,20,000.$$

$$\text{So, Average Profit} = \frac{2,20,000}{5} = ₹ 44,000.$$

Step – 2: Goodwill on the basis of Average Profit of five years:

$$\begin{aligned}\text{Goodwill} &= \text{Average Profit} \times \text{No. of years} \\ &= 44,000 \times 5 \\ &= ₹ 2,20,000\end{aligned}$$

Step – 3: Goodwill on the basis of annuity:

$$\begin{aligned}\text{Goodwill} &= \text{Goodwill on the basis of average profit} \times \text{Present value of annuity} \\ &= 2,20,000 \times 3.78 \\ &= ₹ 8,31,600\end{aligned}$$

Super Profit Methods

We have noticed in the first method that it takes into account only average profits for the purpose of assessing goodwill. However, a purchaser of business would be prepared to pay for goodwill only if he is able to earn more than average profit.

That is goodwill attaches to that business which earns an extra profit. This extra profit is called super profit. What is super profit?

“Super Profit is the excess of the annual average profit of business over the expected profit.”

Super Profit = Average Profit – Expected Profit

Suppose, in a firm average capital invested is ₹ 50,000 and the expected rate of return in this class of business is 10%. The firm earns the annual average profit of ₹ 7,500, then the super profit would be as under:

Super Profit = 7,500 – 5,000 = ₹ 2,500

Where, Expected Profit = Capital Employed × E.R.R.

= ₹ 50,000 × 10%

= ₹ 5,000

Super Profit Methods

I. Certain number of years' purchase of Super Profit Method:

Firstly, super profit is found out as mentioned earlier. Then it is multiplied by certain number of years given in the example. This will give the value of Goodwill.

Steps of Valuing Goodwill by Purchase of Super Profit Method:

Step – 1: Calculate the Capital Employed

$$\text{Capital Employed} = \text{Total Assets} - \text{Total Liabilities}$$

Step – 2: Calculate the Expected Profit on the basis of the E.R.R.

$$\text{Expected Profit} = \text{Capital Employed} \times \text{E.R.R.}$$

Step – 3: Calculate the Average Net Profit i.e., Future Maintainable Profit

Step – 4: Calculate the Super Profit

$$\text{Super Profit} = \text{Average Profit} - \text{Expected Profit (Step 3 - Step 2)}$$

Step – 5: Calculate Goodwill

$$\text{Goodwill} = \text{Super Profit} \times \text{No. of years' purchase}$$

(A) Capital Employed :

It is equal to net assets of the business, i.e. total assets (except intangible assets like goodwill) less total liabilities.

Capital Employed = Total Assets – Total Liabilities.

(i) For the purpose of ascertaining capital employed the values of fixed assets to be considered should be the current market values, as the profits are expressed in terms of current price. If there is a depreciation fund balance against a particular fixed asset, but the market value of the asset is more than the depreciated value (cost price less accumulated balance of depreciation fund), then the market value is taken into account.

(ii) Non-trading Investments : For the purpose of finding out Net Assets, non-trading investments should not be included. Non-trading investments are simply investments of extra funds of business. But Trade investments must be included e.g. sinking fund investments, P.F. investments, investment in shares of subsidiary co. etc.

If the investments are necessary to carry on business, it is called trade investments. If the type of investments is not given, it may be treated as non-trading investments.

(iii) Fictitious assets are not to be added e.g. Preliminary expenses, debenture discount, underwriting commission, advertisement suspense account etc. If however, Advertisement Suspense A/c is the **advertisement expense prepaid**, then it must be included.

(iv) While deducting liabilities from total assets, it must be remembered that **credit balances which are only accumulated profit** should not be deducted. e.g. Reserve Fund, Workmen's Compensation Fund, Investment fluctuation fund, P & L A/c. (Cr.) etc. But the following funds are liabilities and so they must be deducted : Provident Fund, Workers Profit Sharing Fund etc

(v) There is one question whether Debentures should included or not. According to one opinion if goodwill is to be calculated from shareholders' view point, then the amount of debentures should be deducted. But some accountants include Debentures in capital employed and debentures and not deducted as a liability. But we will consider shareholders viewpoint and debentures will be deducted as a liability.

(vii) Preference Capital and Pref. Dividend : Generally, goodwill is ascertained from the view-point of equity shareholders, in so far as the preference shareholders get only fixed dividend even in case of large profits. Hence, preference capital is generally deducted from the capital employed in which case, the preference dividend is also deducted from the average profits.

The Capital Employed in business is found out by Two Methods.

(1) On Assets basis (2) On Liabilities basis.

(1) On Assets basis (Assets Approach) :

Fixed Assets (Market Values)		...
Trade Investments		...
Current Assets		...
		<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>
		...

Less : Liabilities :

Debentures etc.

Current liabilities

...

...

} **Capital Employed**

...

...

(2) On Liabilities basis (Liabilities Approach)

Equity Share Capital

Reserves and Surplus

Increase on revaluation of assets

Less : Fictitious Assets

(1) Preliminary Exp.

(2) P & L A/c. (Dr.)

(3) Decrease in value of Fixed Assets

Capital Employed

...

...

...

...

...

...

...

(C) Annual Average Profit or Future Maintainable Profit : The annual average profit has to be ascertained for the purpose of arriving at super profit. It is the average profit of the last three to five years. (The average annual profit is better known as Future Maintainable Profit).

(i) It is not enough to take only last one year's profit, as it does not reflect the correct trend of profits. Generally, the past three to five years'

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profits are averaged, so that they may include all possible seasonal changes and fluctuations.

(ii) Those expenses which were charged against profits in the past but which are not likely to recur in future must be added back to the profits e.g. The seller of business was paying rent of premises, but the purchaser owns the premises, then the purchaser will not pay rent and the rent should be added to the profit. Similarly, allowance must be made for the expenses which are likely to be incurred or increased in future. e.g. managerial remuneration.

(iii) If any unusual extra-ordinary expenses or incomes have been included in the past, then it must be written back e.g. loss due to fire. If it had been debited to profit of some past year, it must be added back to the profit to get Normal Profit. Similar treatment should be given to some unusual income (e.g. govt. subsidy received once only.)

(e.g. govt. subsidy received once only.)

(iv) If in the past some non-recurring expenses or incomes have been considered for arriving at profit or loss, it must be reversed to get normal profit. e.g. if any amount realised on sale of machinery is credited to profit and loss account, it must be deducted from profit. If contribution to any political party has been debited to profit and loss account, it must be added back to profit.

(v) If any mistake had been committed in past while calculating profit or loss, its effects must be removed. e.g. purchase price of a machine had been debited to profit and loss account, then it must be added back to profit. If depreciation is to be charged, then depreciation on this machine should now be calculated and deducted from the profit. Its effects in the next year should also be given.

(vi) Similarly if closing stock is valued at a higher figure, then the difference should be deducted from profit of that year. Its effect in the next year's profit must also be given. The opening stock of next year is shown at a higher figure, which has reduced the profit. So the profit of the next year should be increased by that amount.

(vii) If the investments have not been included in the capital employed, then interest on such investments should also be excluded from the profits.

(viii) The average profit should be reduced by the amount which is considered to be reasonable remuneration for services of proprietors or partners.

(ix) If during any past year, there were unusual circumstances prevailing e.g. a long strike and profit is considerably less or there is a loss, then profit or loss of that year should not be considered for calculating average profit.

(x) Provision should be made for possible future taxation liability. If the future maintainable profit is going to be reduced considerably by such taxation

liability, the amount of goodwill payable by the purchaser will be considerably less.

(xi) As the goodwill is valued from the view-point of equity shareholders, the preference dividend should be deducted from the average profits.

Average Profit of Business :

Profit as per Profit and Loss Account		...
<i>Less :</i> (1) Income from Non-trading Assets	...	
(2) Expected future expenses	<u>...</u>	...
<i>Add :</i> (1) Expenses which are debited but not likely to be incurred in future	...	
(2) Incomes likely to be received in future	<u>...</u>	<u>...</u>

Future Maintainable Profit

<i>Less :</i> Preference Dividend		...
Profit for Equity shareholders		<u>...</u>
(Normal Profit or Average Profit)		<u><u>...</u></u>

(D) Valuation of Goodwill :

Super profit is obtained by deducting the expected future profits from the average net profits of the firm. The super profit so ascertained is then multiplied by the number of years which a new firm would take to earn that much profit.

$$\text{Super Profit} = \text{Average Profit} - \text{Expected Profit}$$

$$\text{Goodwill} = \text{Super Profit} \times \text{No. of Years}$$

Average Capital Employed

Some authors believe that instead of taking capital employed for finding out super profit, the Average Capital Employed must be considered.

Average Capital Employed is calculated by dividing the total of opening and closing capitals by two.

$$\text{Average Capital Employed} = \frac{\text{Opening Capital} + \text{Closing Capital}}{2}$$

If the figure of opening capital is not available, then average capital is ascertained by deducting half the profits from the closing capital. This is done on the assumption that the capital employed increases over the year due to profits earned and the profit is earned evenly during the year.

$$\text{Average Capital Employed} = \text{Closing Capital} - \text{Half Year's Profit}$$

- Example:** From the following information find out capital employed of Montu Ltd.:

	₹		₹
Land and Building	1,00,000	Debtors	22,000
Machinery	60,000	Creditors	10,000
10% Debentures	50,000	Underwriting Commission	5,000
7.5% Govt. Securities	12,000	Depreciation Fund	10,000
Provident Fund	10,000	(Machinery)	
Preliminary Expenses	5,000	Bad debt Reserve	2,000
		Share Capital	50,000

The profit earned during the year is ₹ 56,000. What will be the “Average Capital Employed” in the business for valuation of goodwill?

• **Solution:**

$$\text{Capital Employed} = \text{Total Assets} - \text{Total Liabilities}$$

Total Assets		₹
Land and Building		1,00,000
Machinery	60,000	
- Depreciation Fund	<u>10,000</u>	50,000
Debtors	22,000	
- Bad debt reserve	<u>2,000</u>	<u>20,000</u>
Total Assets		1,70,000
Less: Total Liabilities		
10% Debentures	50,000	
Provident Fund	10,000	
Creditors	<u>10,000</u>	<u>70,000</u>
So, Capital Employed		<u><u>1,00,000</u></u>

$$\text{Average Capital Employed} = \text{Capital Employed} - \frac{1}{2} \times \text{Profit}$$

$$= 1,00,000 - \left(\frac{1}{2} \times 56,000 \right)$$

$$= 1,00,000 - 28,000$$

$$= \boxed{\text{₹ } 72,000}$$

- **Example:** From the following information, you are asked to calculate the value of goodwill of a firm assuming that goodwill is to be taken at 5 years' purchase of super profit.

	₹
(1) Average Capital Employed in the business	9,00,000
(2) Net profit for the past four years: ₹ 1,19,500; ₹ 1,17,000; ₹ 1,22,000 & ₹ 1,23,500	
(3) Fair annual remuneration of partner	18,000
(4) Expected rate of return	10 %

- **Solution:** Step – 1: Capital Employed = ₹ 9,00,000

$$\begin{aligned}\text{Step – 2: Expected Profit} &= \text{Capital Employed} \times \text{E.R.R.} \\ &= ₹ 9,00,000 \times 10\% \\ &= ₹ 90,000\end{aligned}$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No.of years}}$$

Here, total profit of last four years:

$$1,19,500 + 1,17,000 + 1,22,000 + 1,23,500 = 4,82,000.$$

$$\text{So, Average Profit} = \frac{4,82,000}{4} = ₹ 1,20,500$$

$$\begin{aligned}\text{Future Maintainable Profit} &= \text{Average Profit} - \text{Fair remuneration of partner} \\ &= ₹ 1,20,500 - ₹ 18,000 \\ &= ₹ 1,02,500\end{aligned}$$

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit
= ₹ 1,02,500 – ₹ 90,000
= **₹ 12,500**

Step – 5: Goodwill = Super Profit × No. of purchasing years'
= ₹ 12,500 × 5
= **₹ 62,500**

- Example 5:** The Balance Sheet as on 31-12-2020 of a partnership firm was as follows:

Liabilities		₹	Assets		₹
Capital Accounts:			Goodwill		7,000
Mukesh	40,000		Plant		80,000
Rajesh	35,000		Furniture		4,000
Dipak	30,000	1,05,000	Stock		51,000
Current Accounts:			Debtors		30,000
Mukesh	10,000		Prepaid Expenses		2,000
Rajesh	5,000		Cash and Bank Balance		6,000
Dipak	5,000	20,000			
Creditors		40,000			
Bills Payable		15,000			
		<u>1,80,000</u>			<u>1,80,000</u>

It was proposed to form a company to acquire business of partnership firm for the purpose of acquisition.

(1) The assets were revalued as follows:

Plant ₹ 75,000; Furniture ₹ 5,500; Stock ₹ 50,000; Debtors ₹ 28,500.

(2) The profits of the partnership after tax for the last three years and appropriate weights to be used are as under:

Year	Profit ₹	Weight
2018	24,000	1
2019	30,000	3
2020	28,500	2

(3) Similar business paid dividend of 8% per annum on their Equity Shares.

Three years' purchase of Super profits was the agreed price for goodwill. Compute super profits on the basis of the weighted average profit of past three years. Determine goodwill of partnership firm from the particulars given above.

• **Solution:**

Step – 1: Capital Employed = Total Assets – Total Liabilities

Total Assets		₹
Plant		75,000
Furniture		5,500
Stock		50,000
Debtors		28,500
Prepaid Expenses		2,000
Cash and Bank Balance		<u>6,000</u>
Total Assets		1,67,000
Less: Total Liabilities		
Creditors	40,000	
Bills Payables	<u>15,000</u>	<u>55,000</u>
So, Capital Employed		<u><u>1,12,000</u></u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 1,12,000 \times 8\%$$

$$= ₹ 8,960$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, total Weighted profit and Weights of last three years:

Year	Profit	Weight	Weighted Profit
2018	24,000	1	24,000
2019	30,000	3	90,000
2020	28,500	2	57,000
Total	----	6	1,71,000

$$\text{So, Weighted Average Profit} = \frac{1,71,000}{6} = ₹ 28,500$$

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit

$$= ₹ 28,500 – ₹ 8,960$$

$$= ₹ 19,540$$

Step – 5: Goodwill = Super Profit × No. of purchasing years'

$$= ₹ 19,540 × 3$$

$$= ₹ 58,620$$

11. The Balance Sheet of Sudama Ltd. as on 31-3-2020 is as under :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
8,000 Equity Shares of Rs. 100 each		8,00,000
3,000 12% pref. Shares of Rs. 100 each		3,00,000
(b) Reserves and Surplus :		
Securities Premium		1,00,000
Profit & Loss Account		1,50,000
General Reserve		3,00,000
(2) Non-Current Liabilities :		
(a) Long Term Borrowings : 10% Debentures		2,00,000
(a) Long Term Provisions :		
Workmen's Profit Sharing Fund		40,000
Provident Fund		1,50,000
(3) Current Liabilities :		
(a) Trade Payables : Creditors		1,70,000
(b) Short Term Provisions :		
Proposed Dividend :		
Preference	36,000	
Equity	1,04,000	1,40,000
	<u>Total</u>	<u>23,50,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land and Building		6,00,000
Plant and Machinery		8,00,000
(ii) Intangible Assets : Goodwill		1,00,000
(b) Non-Current Investments :		
10% Govt. Securities (Investment of P.F.)		1,50,000
15% Debentures of Bansi Ltd. (Face value Rs. 1,00,000)		90,000
(c) Other Non-Current Assets : Preliminary Expenses		
		30,000

(2) Current Assets :		
(a) Inventories : Stock		3,00,000
(b) Trade Receivables :		
Debtors	1,80,000	
– B.D.R.	<u>10,000</u>	1,70,000
(c) Cash and Cash Equivalents : Bank balance		80,000
(d) Other Current Assets : Prepaid Expenses		<u>30,000</u>
	Total	<u>23,50,000</u>

The Narsinh Ltd. wants to purchase the business considering the following information. Calculate the Goodwill.

- (1) The market value of Land and Building is twice the book value.
- (2) The Plant & Machinery require 20% depreciation.
- (3) The stock includes certain useless items costing Rs. 40,000 having no scrap value.
- (4) All the debtors are good (Solvent).
- (5) The profits (before providing 50% tax) of the last three years are as under.
Calculate on the basis of weighted average.

2017-'18	Rs. 9,00,000
2018-'19	Rs. 12,00,000
2019-'20	Rs. 14,00,000

- (6) The expected rate of return of company is 10%.
- (7) The goodwill of the company for this purpose is agreed to be valued at 3 years purchases of the super profit basis.

• **Solution: Step – 1: Capital Employed = Total Assets – Total Liabilities**

		₹
Total Assets		
Land and Building (₹ 6,00,000 × 2)		12,00,000
Plant and Machinery	8,00,000	
- Depreciation 20%	<u>1,60,000</u>	6,40,000
10% Govt. Securities (Investment of P.F.)		1,50,000
Stock (3,00,000 – Scrap 40,000)		2,60,000
Debtors (All are solvent)		1,80,000
Cash and Bank Balance		80,000
Prepaid Expenses		<u>30,000</u>
Total Assets		<u>25,40,000</u>
Less: Total Liabilities		
10% Debentures	2,00,000	
Workmen's Profit Sharing Fund	40,000	
Provident Fund	1,50,000	
Creditors	<u>1,70,000</u>	<u>5,60,000</u>
Net Assets		19,80,000
Less: 12% Preference Share Capital		3,00,000
Preference Dividend		<u>36,000</u>
So, Capital Employed		<u><u>16,44,000</u></u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 16,44,000 \times 10\%$$

$$= ₹ 1,64,400$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, total Weighted profit and Weights of last three years:

Year	Profit	Weight	Weighted Profit
2017-'18	9,00,000	1	9,00,000
2018-'19	12,00,000	2	24,00,000
2019-'20	14,00,000	3	42,00,000
Total	----	6	75,00,000

$$\text{So, Weighted Average Profit} = \frac{75,00,000}{6} = ₹ 12,50,000$$

Future Maintainable Profit:

	₹
Weighted Average Profit	12,50,000
Less: Interest on Deb. Of Bansi Ltd. (1,00,000 × 15%)	15,000
	<hr/>
	12,35,000
Less: Taxes (50%)	6,17,500
	<hr/>
	6,17,500
Less: Preference Dividend	36,000
	<hr/>
So, Future Maintainable Profit	<u><u>5,81,500</u></u>

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit
= ₹ 5,81,500 – ₹ 1,64,400
= **₹ 4,17,100**

Step – 5: Goodwill = Super Profit × No. of purchasing years'
= ₹ 4,17,100 × 3
= **₹ 12,51,300**

4. The following is the Balance Sheet of Ramnath Ltd. as on 31-12-2019:

Particulars	Note	Rs.
EQUITY AND LIABILITIES :		
(I) Shareholders' Funds :		
(a) Share Capital :		
Equity Share Capital of Rs. 10 each fully paid up		3,00,000
10% Pref. Share Capital of Rs. 100 each fully paid up		2,50,000
(b) Reserves and Surplus :		
General Reserve		90,000
Profit & Loss A/c :		
Balance as on 1-1-'19	4,000	
+ Profit for 2019, before deducting tax at 50%	2,40,000	
		<u>2,44,000</u>
(2) Non-Current Liabilities :		
(a) Long Term Borrowings : 12% Debentures		2,80,000
(b) Long Term Provisions : Provident Fund		45,000
(3) Current Liabilities :		
(a) Trade Payables :		
Creditors		1,70,000
Bills Payables		16,000
(b) Other Current Liabilities : Outstanding Expenses		
		5,000
	Total	<u>14,00,000</u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land and Building		2,30,000
Machinery		4,40,000
(ii) Intangible Assets : Goodwill		
		15,000
(b) Non-Current Investments :		
Investment against provident fund		45,000
12% Debentures of Shivam Ltd. (Face value Rs. 80,000 and interest is taxable)		85,000
(c) Other Non-Current Assets : Preliminary Expenses		
		4,000
(2) Current Assets :		
(a) Inventories : Stock		
(b) Trade Receivables :		
Debtors		2,30,000
Bills Receivables		2,70,000
		50,000

(c) Cash and Cash Equivalents : Cash & Bank balance	24,000
(d) Other Current Assets : Prepaid Expenses	7,000
Total	14,00,000

Additional Informations :

- (1) The present market value of Land & Building is Rs. 3,42,500, while the remaining assets, are to be taken at their book value.
- (2) The expected rate of return on capital in the class of business done by Ramnath Ltd. is 12%.
- (3) The profits of the company, before tax at 50% for the past three years are as under :
2016 Rs. 1,80,000, 2017 Rs. 1,90,000 and 2018 Rs. 2,10,000.

From the above particulars, you are required to compute, the value of goodwill of the company on the basis of four years' purchase of its super profits, calculated on weighted average profit of the last four years. The appropriate weights to be used are :

2016 : 1, 2017 : 2, 2018 : 3 and 2019 : 4.

• **Solution: Step – 1: Capital Employed = Total Assets – Total Liabilities**

Total Assets		₹
Land and Building		3,42,500
Machinery		4,40,000
Investment against provident fund		45,000
Stock		2,30,000
Debtors		2,70,000
Bills Receivable		50,000
Cash & Bank Balance		24,000
Prepaid expenses		7,000
	Total Assets	<u>14,08,500</u>
Less: Total Liabilities		
Provision for taxation	1,20,000	
12% Debentures	2,80,000	
Provident Fund	45,000	
Creditors	1,70,000	
Bills Payable	16,000	
Outstanding Expenses	5,000	
		<u>6,36,000</u>
	Net Assets	7,72,500
Less: 10% Preference Share Capital		2,50,000
	So, Capital Employed	<u><u>5,22,500</u></u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 5,22,500 \times 12\%$$

$$= ₹ 62,700$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, total Weighted profit and Weights of last four years:

Year	Profit	Weight	Weighted Profit
2016	1,80,000	1	1,80,000
2017	1,90,000	2	3,80,000
2018	2,10,000	3	6,30,000
2019	2,40,000	4	9,60,000
Total	----	10	21,50,000

$$\text{So, Weighted Average Profit} = \frac{21,50,000}{10} = ₹ 2,15,000$$

Future Maintainable Profit:

	₹
Weighted Average Profit	2,15,000
Less: Interest on Deb. of Shivam Ltd. (80,000 × 12%)	9,600
	<hr/>
	2,05,400
Less: Taxes (50%)	1,02,700
	<hr/>
	1,02,700
Less: Preference Dividend	25,000
	<hr/>
So, Future Maintainable Profit	<u><u>77,700</u></u>

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit

$$= ₹ 77,700 - ₹ 62,700$$

$$= ₹ 15,000$$

Step – 5: Goodwill = Super Profit × No. of purchasing years'

$$= ₹ 15,000 \times 4$$

$$= ₹ 60,000$$

Rs. 15. From the following information of Janki Junkfood Ltd. Find out goodwill by purchase of five years' excess profit method :

	Rs.
25,000 Equity Shares of Rs. 100 each	25,00,000
10% 5,000 Pref. Shares of Rs. 100 each	5,00,000
General Reserve	60,000
Profit & Loss A/c (credit)	70,000
Creditors	1,00,000
Bills payables	80,000
Provident fund	50,000
Total profit of last four years (before 50 % tax)	64,00,000
Expected rate of return on capital	7%
Risk rate in such business	3%

Total assets of Co. are as under :

Fixed assets, of total assets	75%
Current assets, of total assets	20%
Fictitious Assets, of total assets	5%

- Solution:** In this sum, first of all we need to prepare Balance Sheet.

Liabilities	₹	Assets	₹
25,000 Equity Shares of ₹ 100 each	25,00,000	Fixed Assets (75% of total assets)	25,20,000
10% 5,000 Pref. Shares of ₹ 100 each	5,00,000	Current Assets (20% of total assets)	6,72,000
General Reserve	60,000	Fictitious Assets (5% of total assets)	1,68,000
Profit & Loss A/c (credit)	70,000		
Creditors	1,00,000		
Bills Payable	80,000		
Provident Fund	50,000		
	<u>33,60,000</u>		<u>33,60,000</u>

Here, Total of Liability side is ₹ 33,60,000. So, Total Assets are also ₹ 33,60,000.

Now, Fixed Assets are 75% of total assets:

$$\text{So, Fixed assets} = 33,60,000 \times 75\% = ₹ 25,20,000$$

$$\text{Current assets} = 33,60,000 \times 20\% = ₹ 6,72,000$$

$$\text{Fictitious assets} = 33,60,000 \times 5\% = ₹ 1,68,000$$

Step – 1: Capital Employed = Total Assets – Total Liabilities

Total Assets		₹
Fixed Assets		25,20,000
Current Assets		<u>6,72,000</u>
Total Assets		<u>31,92,000</u>
Less: Total Liabilities		
Creditors	1,00,000	
Bills Payable	80,000	
Provident Fund	<u>50,000</u>	<u>2,30,000</u>
Net Assets		29,62,000
Less: 10% Preference Share Capital		<u>5,00,000</u>
So, Capital Employed		<u><u>24,62,000</u></u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 24,62,000 \times 10\% (7\% \text{ E.R.R.} + 3\% \text{ Risk rate})$$

$$= ₹ 2,46,200$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No. of years}}$$

$$\text{So, Average Profit} = \frac{64,00,000}{4} = ₹ 16,00,000$$

Future Maintainable Profit:

	₹
Average Profit	16,00,000
Less: Interest on non-trading investment	----
	<hr/>
	16,00,000
Less: Taxes (50%)	8,00,000
	<hr/>
	8,00,000
Less: Preference Dividend (₹ 5,00,000 × 10%)	50,000
	<hr/>
So, Future Maintainable Profit	<u>7,50,000</u>

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit

$$= ₹ 7,50,000 – ₹ 2,46,200$$

$$= ₹ 5,03,800$$

Step – 5: Goodwill = Super Profit × No. of purchasing years'

$$= ₹ 5,03,800 × 5$$

$$= ₹ 25,19,000$$

13. The Balance Sheet of Meghdoot Ltd. as on 31-3-2020 is as under :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		
1,00,000 Equity Shares of Rs. 10 each		10,00,000
3,000 12% Pref. Shares of Rs. 100 each		3,00,000
(b) Reserves and Surplus :		
Profit & Loss A/c :		
Balance of 2018-'19	1,60,000	
Profit for 2019-'20	<u>9,20,000</u>	10,80,000
(2) Non-Current Liabilities :		
(a) Long Term Provisions :		
Depreciation Fund :		
Building	80,000	
Investments	<u>70,000</u>	1,50,000
(3) Current Liabilities :		
(a) Trade Payables : Creditors		
		<u>20,000</u>
Total		<u><u>25,50,000</u></u>
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Building at cost		5,00,000
Furniture at cost		2,00,000
(b) Non-Current Investments :		
5% Govt. Securities (Face value Rs. 10,00,000)		9,00,000
(c) Other Non-Current Assets : Preliminary expenses		
		20,000

(2) Current Assets :		
(a) Inventories : Stock		70,000
(b) Trade Receivables :		
Debtors	8,00,000	
– Bad debts reserve	<u>40,000</u>	7,60,000
Bills Receivables		20,000
(c) Cash and Cash Equivalents : Bank balance		80,000
	Total	<u><u>25,50,000</u></u>

You are required to compute the value of Goodwill of the company, at three years' purchase of its super profit taking into account, the following particulars :

- (1) The building is now worth Rs. 7,50,000.
- (2) Companies doing similar business show a profit earning capacity of 20% on market value of their shares.
- (3) The profits for the past three years have shown an increase of Rs. 60,000 annually.
- (4) Profit for 2019-'20 shown above is before tax; assume tax at 50%.
- (5) For computation of average profit weights to be used are 1, 2 and 3 respectively.

- Solution:** Step – 1: Capital Employed = Total Assets – Total Liabilities

Total Assets		₹
Building		7,50,000
Furniture		2,00,000
Stock		70,000
Debtors	8,00,000	
Less: Bad debt reserve	<u>40,000</u> →	7,60,000
Bills Receivable		20,000
Cash & Bank Balance		<u>80,000</u>
Total Assets		18,80,000
Less: Total Liabilities		
Provision for taxation (50% of Profit)	4,60,000	
Creditors	<u>20,000</u> →	<u>4,80,000</u>
Net Assets		14,00,000
Less: 10% Preference Share Capital		<u>3,00,000</u>
So, Capital Employed		<u><u>11,00,000</u></u>

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$= ₹ 11,00,000 \times 20\%$$

$$= ₹ 2,20,000$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, the profits for the past three years have an increase of ₹ 60,000 annually:

Year	Profit	Weight	Weighted Profit
2017-'18	8,00,000	1	8,00,000
2018-'19	8,60,000	2	17,20,000
2019-'20	9,20,000	3	27,60,000
Total	----	6	52,80,000

$$\text{So, Weighted Average Profit} = \frac{52,80,000}{6} = ₹ 8,80,000$$

Future Maintainable Profit:

	₹
Weighted Average Profit	8,80,000
Less: Interest on 5% Govt. Securities (10,00,000 × 5%)	<u>50,000</u>
	8,30,000
Less: Taxes (50%)	<u>4,15,000</u>
	4,15,000
Less: Preference Dividend (3,00,000 × 12%)	<u>36,000</u>
So, Future Maintainable Profit	<u><u>3,79,000</u></u>

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit
= ₹ 3,79,000 – ₹ 2,20,000
= **₹ 1,59,000**

Step – 5: Goodwill = Super Profit × No. of purchasing years'
= ₹ 1,59,000 × 3
= **₹ 4,77,000**

Rs. 6,12,150 (2,04,050 × 3).]

18. The Balance Sheet of Navneet Ltd. as on 31-3-2020 is as under :

Particulars	Note	Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholders' Funds :		
(a) Share Capital :		5,00,000
Equity Shares (of Rs. 100 each)		2,00,000
10% Preference Shares		
(b) Reserves and Surplus :		50,000
Profit & Loss A/c		1,00,000
General Reserve		
(2) Non-Current Liabilities :		1,50,000
(a) Long Term Borrowings : 8% Debentures		
(3) Current Liabilities :		1,20,000
(a) Trade Payables : Creditors		2,00,000
(b) Short Term Provisions : Provision for Taxation		
Total		13,20,000
II. ASSETS :		
(1) Non-Current Assets :		
(a) Fixed Assets :		
(i) Tangible Assets :		
Land and Buildings		4,00,000
Plant and Machinery		3,20,000
(ii) Intangible Assets : Goodwill		60,000

(b) Non-Current Investments :	
10% Government Securities	1,00,000
12% Provident Fund Investments	1,00,000
(c) Other Non-Current Assets : Preliminary Expenses	20,000
(2) Current Assets :	
(a) Inventories : Stock	1,20,000
(b) Trade Receivables : Debtors	1,60,000
(c) Cash and Cash Equivalents : Cash balance	40,000
Total	<u>13,20,000</u>

Additional Informations :

- (1) Income tax assessment upto the last year is completed and there remains no liability for that. The provision for income tax is made at 50% of profit this year.
- (2) The profit of the company before tax is increasing every year by Rs. 80,000 (for the last three years, profit is increasing in this manner)
- (3) The book value of land and buildings is 20% less than their market value. So market value is to be considered. Provide Rs. 10,000 for bad debts reserve.
- (4) Expected rate of return is 12%.
- (5) The scrutiny of profits reveals the following :
 - (i) Management cost of Rs. 3,000 is to be deducted from the profit every year.
 - (ii) The profit of 2017-'18 is reduced by Rs. 6,000 due to stock destroyed by fire.
 - (iii) On 1-10-2018, major repairs of Rs. 20,000 is charged as revenue expenses. The said amount is to be considered as capital expenses. Depreciation is to be charged at 10% on the cost of Rs. 20,000 every year.

Calculate the value of goodwill on the basis of four years' purchase of super profit.

- Solution: Step – 1: Capital Employed = Total Assets – Total Liabilities**

Total Assets	₹
Land and Building Suppose, B.V. is 80(100 – 20%); then M.V. is 100 So, if B.V. is 4,00,000; then M.V. is	5,00,000
Plant and Machinery	3,20,000
12% Provident Fund Investments	1,00,000
Stock	1,20,000
Debtors (1,60,000 – 10,000 B.D.R.)	1,50,000
Cash Balance	40,000
Total Assets	12,30,000
Less: Total Liabilities	
8% Debentures	1,50,000
Creditors	1,20,000
Provision for taxation	2,00,000
Net Assets	7,60,000
Less: 10% Preference Share Capital	2,00,000
So, Capital Employed	5,60,000

Step – 2: Expected Profit = Capital Employed × E.R.R.
 = ₹ 5,60,000 × 12%
 = **₹ 67,200**

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Weighted Average Profit} = \frac{\text{Total Weighted Profit}}{\text{Total Weight}}$$

Here, Profit of the company before tax is increasing every year by ₹ 80,000 (for the last three years) and the scrutiny of profits reveals following adjustments :

Particulars	2017-'18	2018-'19	2019-'20
Profit before tax	2,40,000	3,20,000	4,00,000
(1) Management cost	(3,000)	(3,000)	(3,000)
(2) Stock destroyed by fire (In 2017-'18)	6,000	---	---
(3) Capital Expense considered as Revenue	---	20,000	---
Depreciation of Capital expense	---	(1,000)	(2,000)
So, Adjusted Profit before tax	2,43,000	3,36,000	3,95,000

Now, the Weighted profits and total weights of the last three years are as under:

Year	Profit	Weight	Weighted Profit
2017-'18	2,43,000	1	2,43,000
2018-'19	3,36,000	2	6,72,000
2019-'20	3,95,000	3	11,85,000
Total	----	6	21,00,000

$$\text{So, Weighted Average Profit} = \frac{21,00,000}{6} = \text{₹ } 3,50,000$$

□ Future Maintainable Profit:

	₹
Weighted Average Profit	3,50,000
Less: Interest on 10% Govt. Securities (1,00,000 × 10%)	10,000
	<hr/>
	3,40,000
Less: Taxes (50%)	1,70,000
	<hr/>
	1,70,000
Less: Preference Dividend (2,00,000 × 10%)	20,000
	<hr/>
So, Future Maintainable Profit	<u>1,50,000</u>

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit
= ₹ 1,50,000 – ₹ 67,200
= **₹ 82,800**

Step – 5: Goodwill = Super Profit × No. of purchasing years'
= ₹ 82,800 × 4
= **₹ 3,31,200**

Super Profit Methods

II. Capitalization of Super Profit Method:

Just as goodwill is computed on the basis of capitalization of average profit, similarly goodwill can also be valued on the basis of capitalization of super profit. The steps for solving examples are as follow:

Steps of Valuing Goodwill by Capitalization of Super Profit Method:

Step – 1: Calculate the Capital Employed

$$\text{Capital Employed} = \text{Total Assets} - \text{Total Liabilities}$$

Step – 2: Calculate the Expected Profit on the basis of the E.R.R.

$$\text{Expected Profit} = \text{Capital Employed} \times \text{E.R.R.}$$

Step – 3: Calculate the Average Net Profit i.e., Future Maintainable Profit

Step – 4: Calculate the Super Profit

$$\text{Super Profit} = \text{Average Profit} - \text{Expected Profit (Step 3 – Step 2)}$$

Step – 5: Calculate Goodwill by capitalization of super profit

$$\text{Goodwill} = \frac{\text{Super Profit}}{\text{Expected Rate of Return}} \times 100$$

- ❑ Remember that in this method the capitalized value of Super Profit is the value of goodwill.

- **Example-3:** With a view to floating a limited company, the assets of a partnership firm are being acquired. From the following information, calculate the amount of Goodwill by capitalization of super profit method:

	₹
(1) Sundry Assets	9,27,342
(2) Current Liabilities	52,492
(3) Net trading profit for the past four years: ₹ 1,19,500; ₹ 1,17,000; ₹ 1,22,000 & ₹ 1,23,500	
(4) Average Capital Employed	9,00,000
(5) Fair annual remuneration of partner	18,000
(6) Rate of interest	10 %

- **Solution:** Step – 1: Capital Employed = ₹ 9,00,000

$$\begin{aligned}\text{Step – 2: Expected Profit} &= \text{Capital Employed} \times \text{E.R.R.} \\ &= ₹ 9,00,000 \times 10\% \\ &= ₹ 90,000\end{aligned}$$

Step – 3: Find out Average Profit or Future Maintainable Profit:

$$\text{Average Profit} = \frac{\text{Total Profit}}{\text{No.of years}}$$

Here, total profit of last four years:

$$1,19,500 + 1,17,000 + 1,22,000 + 1,23,500 = 4,82,000.$$

$$\text{So, Average Profit} = \frac{4,82,000}{4} = ₹ 1,20,500$$

$$\begin{aligned}\text{Future Maintainable Profit} &= \text{Average Profit} - \text{Fair remuneration of partner} \\ &= ₹ 1,20,500 - ₹ 18,000 \\ &= ₹ 1,02,500\end{aligned}$$

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit

$$= ₹ 1,02,500 – ₹ 90,000$$

$$= ₹ 12,500$$

Step – 5: Goodwill by capitalization of super profit = $\frac{\text{Super Profit}}{\text{Expected Rate of return}} \times 100$

$$= \frac{12,500}{10} \times 100$$

$$= ₹ 1,25,000$$

- **Example-38 (C):** Calculate the value of goodwill by Capitalization of Super Profit Method:

	₹
(1) Total Assets	28,00,000
(2) External Liabilities	8,00,000
(3) Average annual profit	3,00,000
(4) Expected rate of return	8 %

• **Solution:** Step – 1: **Capital Employed = Total Assets – Total Liabilities**
$$= 28,00,000 - 8,00,000$$
$$= \text{₹ } 20,00,000$$

Step – 2: **Expected Profit = Capital Employed × E.R.R.**
$$= \text{₹ } 20,00,000 \times 8\%$$
$$= \text{₹ } 1,60,000$$

Step – 3: **Average Profit or Future Maintainable Profit = ₹ 3,00,000**

Step – 4: **Super Profit = Future Maintainable Profit – Expected Profit**
$$= \text{₹ } 3,00,000 - \text{₹ } 1,60,000$$
$$= \text{₹ } 1,40,000$$

Step – 5: **Goodwill by capitalization of super profit = $\frac{\text{Super Profit}}{\text{Expected Rate of return}} \times 100$**
$$= \frac{1,40,000}{8} \times 100$$
$$= \text{₹ } 17,50,000$$

- **Example-38 (A):** Calculate total assets of the company from the following details:

	₹
Goodwill at 5 years' purchase of super profit	75,000
Average annual profit	90,000
External Liabilities	2,00,000
Preference Share Capital	1,00,000
Expected rate of return	15 %

• **Solution: Step – 1: Capital Employed = Total Assets – Total Liabilities – Pref. Capital**

$$5,00,000 = \text{Total Assets} - 2,00,000 - 1,00,000$$

$$\text{So, Total Assets} = 5,00,000 + 2,00,000 + 1,00,000 = \boxed{\text{₹ 8,00,000}}$$

Step – 2: Expected Profit = Capital Employed × E.R.R.

$$75,000 = \text{Capital Employed} \times 15 \%$$

$$\text{So, Capital Employed} = \frac{75,000}{15 \%} = \text{₹ 5,00,000}$$

Step – 3: Average Profit or Future Maintainable Profit = ₹ 90,000

Step – 4: Super Profit = Future Maintainable Profit – Expected Profit

$$15,000 = \text{₹ 90,000} - \text{Expected Profit}$$

$$\text{So, Expected Profit} = 90,000 - 15,000 = \text{₹ 75,000}$$

Step – 5: Goodwill = Super Profit × No. of purchasing years'

$$75,000 = \text{Super Profit} \times 5 \text{ years'}$$

$$\text{So, Super profit} = \frac{75,000}{5} = \text{₹ 15,000}$$