Chapter 3

Intangible Assets

After studying this chapter you will be able to understand:

3.1 Meaning of Asset.
3.2 Meaning of Tangible Asset.
3.3 Meaning of Intangible Asset.
3.4 Definition of Intangible Asset
3.5 Features of Intangible Assets.
3.6 Distinction between Tangible and Intangible Asset.
3.7 Types of Intangible Assets
3.8 Valuation of Intangible Assets.
3.9 Methods of Valuation of Goodwill.

3.1 **Meaning of Asset:**

A Valuable resource owned, possessed or controlled by a person or organization which has economic value and has the capacity to generate future benefit (income) and can be expressed in money or money worth.

Assets may be tangible or intangible in nature.

3.2 **Meaning of Tangible Asset:**

An Asset that can be touched, felt and seen as it has a definite physical form.

3.3 **Meaning of the term Intangible Asset:**

Anything which is non-physical and can generate future economic benefit to the entity is an intangible asset.

An Asset which is non-monetary identifiable that cannot be seen, felt or physically measured.
3.4 Definition of Accounting Standard (AS) 26 of Intangible Assets:

An Intangible Asset is an identifiable, non-monetary asset, without Physical substance, held for use in production or supply of goods or services, for rentals to others, or for administrative purposes.

3.5 Characteristic features of an Intangible Asset:

1) Non-Physical – it does not have a physical form. Hence it cannot be seen, felt and touched. They cannot be physically measured.
2) Identifiable – It may be a form of legal or contractual right. It is separable from other assets and saleable or transferrable or exchangeable. Hence it can be licensed and rented. It may also in the form of compleitive intangible right.
3) Controllable – The entity or the person has a control over the asset. The powers to enjoy the future economic benefits are vested in the person or entity owning it.
4) Future economic benefits – It has the capacity to generate future economic benefits in the form of cost saving, profits, future market etc.
5) Long term Useful Life: These Assets have a capacity to generate economic benefits for a long term.
6) Self-created or acquired separately of acquired in a business combination

3.6 Difference between Tangible and Intangible Asset:

<table>
<thead>
<tr>
<th>Basis</th>
<th>Tangible Asset</th>
<th>Intangible Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical form</td>
<td>They have a definite physical form. They are visible and can be touched and felt.</td>
<td>They do not have a physical form. They are invisible and cannot be touched and felt.</td>
</tr>
<tr>
<td>Depreciation or Amortization</td>
<td>These are depreciated</td>
<td>These are Amortized.</td>
</tr>
<tr>
<td>Identification of cost</td>
<td>Its cost can be easily calculated.</td>
<td>It is very hard to calculate the cost of an intangible asset.</td>
</tr>
<tr>
<td>Useful Life</td>
<td>Useful life may be for a short or a long term.</td>
<td>Useful life is always for a long term.</td>
</tr>
<tr>
<td>Value to Business/Outsiders</td>
<td>These assets are valuable to both internal and external entities.</td>
<td>They generate internal value to the business entity</td>
</tr>
<tr>
<td>Loan Facility by Mortgaging</td>
<td>Tangible Assets can be mortgaged for availing loan</td>
<td>Intangible assets cannot be mortgaged. However loan can be availed on the basis</td>
</tr>
</tbody>
</table>
facilities of reputation and past performance without mortgaging assets.

<table>
<thead>
<tr>
<th>Types of Tangible and Intangible Assets.</th>
<th>facilities</th>
<th>of reputation and past performance without mortgaging assets.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current or short term include cash, bills receivable, prepaid expenses, bank balances, stock etc. Fixed or long term assets include land, building, machines, furniture, vehicles etc. These are always purchased.</td>
<td>Legal rights include trade secrets, trademarks, brands, logo, software, patents, copyrights, formulas etc. Competitive intangibles include customer loyalty, skills, experience, knowledge, reputation, qualification, personal network, goodwill etc. They may be classified as internally created or purchased.</td>
<td></td>
</tr>
</tbody>
</table>

3.7 Types of Intangible Assets.

3.7.1. Trademark:

Meaning: It is an exclusive legal right in the form of a logo, mark, symbol, design, name, brand etc which can be used only by the person or entity possessing such a right and legally preventing others to use the business’s name, mark or logo.

Definition: Trademark is defined in the Trademark Act, 1999 as, “trademark means a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include the shape of goods, their packaging and combination of colours.” Such a mark may include numerous things such as signatures, names, labels, headings etc

Importance of using Trademarks:

- It helps in recognizing and identifying ones product or services.
- It helps in distinguishing competitor’s goods and services.

3.7.2. Brand:

Meaning: It refers to the unique name or symbol or design or mark given to a product or service for easy identification and distinguishing it from competitors’ products and services. Brands can be legally protected under Trademark Act. For Example:
3.7.3. **Copyright:**

Meaning: It is an exclusive legal right of the author or the originator to print, publish, perform, film, record literary, artistic or music material. This right is prevents others to publish the authors work without legally assigning (permitting). This right is with the originator for a fixed number of years.

Definition: Copyright is a bundle of rights given by the law to the creators of literary, dramatic, musical and artistic works and the producers of cinematograph films and sound recordings. The rights provided under Copyright law include the rights of reproduction of the work, communication of the work to the public, adaptation of the work and translation of the work. The scope and duration of protection provided under copyright law varies with the nature of the protected work.

Importance of using Copyrights:

- It protects original literary, dramatic, and artistic, cinema, film, sound recording, from unauthorized uses.
- It protects the original expression and not the ideas.

3.7.4. **Patents:**

Meaning: It is an exclusive legal right given to a business or a person to manufacture and sell an invention. It is amortizable. It is given for a fixed number of years.

Importance of using patents:

- It gives the inventor a privilege to stop others from using, producing, and selling from the claimed invention.
- It is a declaration given by the Government to the inventor for certain number of years. Thereby protecting the rights of inventions and economically benefit.

3.7.5. **Goodwill.**

Meaning: It refers to the monetary value of the future earning capacity of a business entity.
Goodwill is the excess value paid to a business firm over and above its present net worth. It is the value paid for future excess profit making capacity. It may be the additional amount paid to purchase and entity over and above its book value or fair value.

3.8. **Valuation of Intangible Assets:**

3.8.1. **Valuation of Brands:**

Brands can be valued in the following different approaches.

1) **Cost Based Approach:** It will include all the cost incurred to create, maintain and promote the brand name and image of an entity. It will also include the cost of replacement. The cost incurred to launch a new brand replacing the old one.

2) **Market Based Approach:** It refers to the highest value which the buyer and seller mutually agree to exchange after negotiations. This may also be considered as the market value which is generally quoted in the market or demanded in the market.

3) **Income Based Approach:** It refers to the future earning value which a brand directly contributes. It comprises of the additional revenue which the firm is able to generate for the entity product or services having a brand.

4) **Formula Based Approach:** It refers to the parameters or criteria which the evaluating firms use to find the value of the Brand. (The criteria may include profit, demand, customers, cost saving, competitive advantage etc.)

3.8.2 **Valuation of Patents:**

Patents can be valued in the following methods.

1) **Cost Based Method:** Under this method the present value of the actual cost incurred to develop or replace a patent are computed to find the total value of the patent right. It also includes developmental costs.

2) **Income Based Method:** Under this method the present value of the income which can be generated in future is considered.

3) **Market Based Method:** Under this method the value of similar such patent which is prevailing in the market is considered. The value paid as the license agreement fees for such similar invention is considered as the value of the patent.

3.8.3 **Valuation of a Trademark:**

1) **Cost Based Method:** All the cost incurred to develop, maintain, replace and promote the Trademark will the value of Trademark under this method.

2) **Income Based Method:** The total additional income which is estimated to be generated in future over and above the usual income will be considered as the value of Trademark.
3.8.4 Valuation of a Copyright:

Income or Revenue Based Method: It is an estimate of the total future revenue which can be generated in its estimated useful life minus the amortized value.

3.8.5 Valuation of Goodwill:

Goodwill is the excess amount payable over and above the present fair value or book value or the net worth of a business.

It is usually the amount paid for the additional profits it generates over and above the usual profits generated by a similar business unit.

It is valued at some agreed number of years of profits.

3.9 Methods of valuation of Goodwill

3.9.1. Average profit Method: Average Profit \( \times \) Number of years of Purchase.

Step 1: Find the Average profit from the profits of past few years given.

Average Profit = \( \frac{\text{Sum of profits of certain number of years}}{\text{Agreed number of years}} \).

Step 2: Find the number of years given for the purpose of calculating goodwill.

Step 3: Goodwill = Average profit \( \times \) Number of years of purchase.

Illustration 1:

Following are the profits of Mahesh Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits in Lakhs</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>18</td>
<td>19</td>
<td>100</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 3 years purchase of five years average profit.

Solution:

Step 1: Total of Profits of five years = Rs. 100 Lakhs. (Rs.1 Crore)

Step 2: Average Profit = Total Profits of five years / Five years.

\[ = \text{Rs}100 \text{ lakhs / Five Years.} = \text{Rs} 20 \text{ lakhs.} \]

Step 3: Goodwill = Average Profit \( \times \) 3 Years

\[ = \text{Rs}\text{.20,00,000} \times 3 = \text{Rs} 60,00,000 \text{ (Rs.60 Lakh)} \]
Illustration 2:

Following are the profits for five years of Ambika Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>90000</td>
<td>65000</td>
<td>35000</td>
<td>55000</td>
<td>85000</td>
<td>330000</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of five years average profit.

Solution:

Step 1: Total of Profits of five years = Rs.330000/-

Step 2: Average Profit = Total Profits of five years / Five years.

\[ = \text{Rs}\text{330000} / \text{Five Years} = \text{Rs}\text{66000/-} \]

Step 3: Goodwill = Average Profit X 2 Years

\[ = \text{Rs}\text{66000/-} \times 2 = \text{Rs}\text{132000/-} \]

Illustration 3:

Following are the profits of Girija Tea Depot.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>100000</td>
<td>125000</td>
<td>215000</td>
<td>80000</td>
<td>285000</td>
<td>185000</td>
<td>990000</td>
</tr>
</tbody>
</table>

In 2016 there was an abnormal gain of Rs 45000/- and 2017 there was an abnormal loss of Rs25200/-

Calculate the value of Goodwill on the basis of 4 years purchase of six years average profit.

Solution:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>100000</td>
<td>125000</td>
<td>215000</td>
<td>80000</td>
<td>285000</td>
<td>185000</td>
<td>990000</td>
</tr>
<tr>
<td>Add: Abnormal Loss</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25200</td>
<td>0</td>
<td>0</td>
<td>25200</td>
</tr>
<tr>
<td>Less Abnormal profit</td>
<td>0</td>
<td>0</td>
<td>45000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>100000</td>
<td>125000</td>
<td>170000</td>
<td>105200</td>
<td>285000</td>
<td>185000</td>
<td>970200</td>
</tr>
</tbody>
</table>

Step 1: Total of Profits of Six years = Rs.970200/-

Step 2: Average Profit = Total Profits of Six years / Six years.

\[ = \text{Rs}\text{970200} / \text{Six Years} = \text{Rs}\text{161700/-} \]

Step 3: Goodwill = Average Profit X 4 Years
3.9.2. **Weighted Average Profit Method:** Weighted Average Profit X Agreed number of years.

Step 1: Under this method find the product by multiply each year’s profit with the respective weights given.

Step 2: Find the total of the entire product so calculated,

Step 3: Find the total of all the weights.

Step 4: Find the weighted average profit. Divide Total of products of profits by the total of weights.

Step 5: Goodwill = Weighted average profit X Agreed number of years.

**Illustration 4:**

Following are the profits of Gunjan Dairy along with weights respectively.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>40000</td>
<td>35000</td>
<td>45000</td>
<td>20000</td>
<td>140000</td>
</tr>
<tr>
<td>Weights</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of four years weighted average profit.

**Solution:**

<table>
<thead>
<tr>
<th>Year End</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>40000</td>
<td>35000</td>
<td>45000</td>
<td>20000</td>
<td>140000</td>
</tr>
<tr>
<td>Weights</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Product</td>
<td>40000</td>
<td>70000</td>
<td>135000</td>
<td>80000</td>
<td>325000</td>
</tr>
</tbody>
</table>

Step 1: Total weighted Profits of four years = Rs.325000/-

Step 2: Weighted Average Profit = Total weighted Profits of four years / Total Weight.

\[= \text{Rs325000} / 10. = \text{Rs.32500/-}\]

Step 3: Goodwill = Weighted Average Profit X 2 Years

\[= \text{Rs.32500/-} \times 2 = \text{Rs 65000/-}\]

**Illustration 5:**
Following are the profits of Gajanan Traders along with weights respectively.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>50000</td>
<td>36000</td>
<td>44000</td>
<td>90000</td>
<td>220000</td>
</tr>
<tr>
<td>Weights</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Product</td>
<td>50000</td>
<td>72000</td>
<td>132000</td>
<td>360000</td>
<td>614000</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of four years weighted average profit.

Solution:

Step 1: Total weighted Profits of four years = Rs.614000/

Step 2: Weighted Average Profit = Total weighted Profits of four years / Total Weight.

= Rs614000 / 10. = Rs.61400/-

Step 3: Goodwill = Weighted Average Profit X 2 Years

= Rs.61400/- X 2 = Rs 122800/-

3.9.3 **Super Profit Method:**

Under this method Goodwill is the value of Super Profit multiplied by agreed number of years.

Super profit is the excess profit over the normal profit.

Goodwill = Super Profit X Agreed number if years.

Step 1: Calculate Average Profit.

Average Profit = Sum of profits of certain number of years /Agreed number of years.

Step 2: Calculate normal profit on the capital employed on the basis of the normal rate of return.

Capital Employed ( Net Asset Value) = Total Assets – Outside Liabilities.

Normal Profits = (Capital Employed X Normal Rate of Return) /100.

Step 3: Calculate Super profit by deducting the Normal profit from the average profits

Step 4: Calculate Goodwill by multiplying super profits by agreed number of years.
Goodwill = Super Profit X Agreed number if years.

Illustration 6:

Following are the profits of Balaji Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>45000</td>
<td>40000</td>
<td>32000</td>
<td>48000</td>
<td>35000</td>
<td>200000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs350000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 3 years purchase of the super profits of the business.

Solution:

Step 1: Average Profit = Total profits of 5 years/ 5 years

\[= \frac{200000}{5} = Rs40000/-\]

Step 2: Normal Profit = Capital Employed X Normal Rate of Return /100

\[= \frac{Rs350000 \times 10}{100} = Rs35000/-\]

Step 3: Super Profit = Average Profit – Normal Profit

\[= Rs40000 - Rs35000 = Rs5000/-\]

Step 4: Goodwill = Super Profit X Number of years of purchase

\[= Rs5000 \times 3 = Rs15000/-\]

Illustration 7:

Following are the profits of Bootwala & Sons.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>100000</td>
<td>134000</td>
<td>82000</td>
<td>103000</td>
<td>156000</td>
<td>575000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs900000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 3 years purchase of the super profits of the business.

Solution:

Step 1: Average Profit = Total profits of 5 years/ 5 years

\[= \frac{575000}{5} = Rs115000/-\]
Step 2: Normal Profit = Capital Employed X Normal Rate of Return /100

= Rs900000 X 10/100  = Rs90000/-

Step 3: Super Profit = Average Profit – Normal Profit

= Rs1150000 – Rs90000 = Rs25000/-

Step 4: Goodwill = Super Profit X Number of years of purchase

= Rs25000 X 3 = Rs75000/-

Illustration 8:

Following are the profits for of Rakesh Bakers.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>52000</td>
<td>50000</td>
<td>68000</td>
<td>45000</td>
<td>75000</td>
<td>290000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs400000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 3 years purchase of the super profits of the business.

Solution:

Step 1: Average Profit = Total profits of 5 years/ 5 years

= 290000/5 = Rs58000/-

Step 2: Normal Profit = Capital Employed X Normal Rate of Return /100

= Rs400000 X 10/100  = Rs40000/-

Step 3: Super Profit = Average Profit – Normal Profit

= Rs58000 – Rs40000 = Rs18000/-

Step 4: Goodwill = Super Profit X Number of years of purchase

= Rs18000 X 3 = Rs54000/-

3.9.4 **Capitalization Method:**

Under this method value of Goodwill is ascertained by capitalizing the average profit or super profits.
A) **Capitalizing of average profits:**

Step 1: Find the value of Average Profit from the profits of given few years.

\[
\text{Average Profit} = \frac{\text{Sum of profits of certain number of years}}{\text{Agreed number of years}}.
\]

Step 2: Find the value of Capital

\[
\text{Capital value from the average profits} = \frac{\text{Average Profits}}{\text{Normal Rate of Return}} \times 100.
\]

Step 3: Find the value of Net Assets

Step 4: Find the value of Goodwill

\[
\text{Goodwill} = \text{Capitalized value} - \text{net asset value}
\]

Illustration 9:

The value of net assets of the business is Rs.1240000/- The business has earned an average profit of Rs150000/- for the past few years. The normal rate of return for similar type of business is 10%. Find the Value of Goodwill by capitalization method.

Solution:

Step 1: Capitalized value of Average Profit = Average Profit / Normal Rate of Return X 100

\[
\text{Capitalized value of Average profits} = \frac{150000}{10} \times 100 = \text{Rs. 1500000/-}
\]

Step 2: Goodwill = Capitalized Value – Net Asset Value

\[
= 1500000 - 1240000 = \text{Rs260000/-}
\]

Illustration 10:

The value of net assets of the business is Rs.460000/- The business has earned an average profit of Rs90000/- for the past few years. The normal rate of return for similar type of business is 15%. Find the Value of Goodwill by capitalization method.

Solution:

Step 1: Capitalized value of Average Profit = Average Profit / Normal Rate of Return X 100

\[
\text{Capitalized value of Average profits} = \frac{90000}{15} \times 100 = \text{Rs. 600000/-}
\]

Step 2: Goodwill = Capitalized Value – Net Asset Value

\[
= 600000 - 460000 = \text{Rs140000/-}
\]
Illustration 11:

The value of net assets of the business is Rs. 790000/- The business has earned an average profit of Rs 500000/- for the past few years. The normal rate of return for similar type of business is 5%. Find the Value of Goodwill by capitalization method.

Solution:

Step 1: Capitalized value of Average Profit = Average Profit / Normal Rate of Return X 100

Capitalized value of Average profits = 500000 / 5 X 100 = Rs. 1000000/-

Step 2: Goodwill = Capitalized Value – Net Asset Value

= 1000000 – 790000 = Rs 210000/-


Step 1: Find the capital employed of the organization.

Capital Employed (Net Asset Value) = Total Assets – Outside Liabilities.

Step 2: Calculate expected or required profits from the capital employed.

Normal or Required profits = Capital Employed X Required rate of return / 100.

Step 3: Calculate Average Profit.

Average Profit = Sum of profits of certain number of years / Number of years.

Step 4: Calculate Super Profits.

Super Profits = Average profit – Required Profit

Step 5: Find value of Goodwill

Goodwill = Super Profit X Normal Rate of Return /100.

Illustration 12:

From the following details of Krishna Coffee House find value of goodwill as per capitalization of super profits method.

<table>
<thead>
<tr>
<th>Year End Profits</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>53000</td>
<td>50000</td>
<td>77000</td>
<td>41500</td>
<td>78500</td>
<td>300000</td>
</tr>
</tbody>
</table>
Capital employed in 2015 was Rs250000/-, and the normal rate of return is 10%p.a.

Solution:

Step 1: Average Profit = Total profits of 5 years / 5 years
= 300000 / 5 = Rs60000/-

Step 2: Normal Profit = Capital Employed X Normal Rate of Return /100
= Rs250000 X 10/100 = Rs25000/-

Step 3: Super Profit = Average Profit – Normal Profit
= Rs60000 – Rs25000 = Rs35000/-

Step 4: Goodwill = Super Profit X 100 / Normal Rate of Return
= Rs35000/- X 100/10 = Rs350000/-

Illustration 13:

From the following details of Bihad & Sons find value of goodwill as per capitalization of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>26000</td>
<td>34000</td>
<td>44000</td>
<td>10000</td>
<td>10000</td>
<td>124000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs200000/-, and the normal rate of return is 10%p.a.

Solution:

Step 1: Average Profit = Total profits of 5 years / 5 years
= 124000 / 5 = Rs24800/-

Step 2: Normal Profit = Capital Employed X Normal Rate of Return /100
= Rs200000 X 10/100 = Rs20000/-

Step 3: Super Profit = Average Profit – Normal Profit
= Rs24800 – Rs20000 = Rs4800/-

Step 4: Goodwill = Super Profit X 100 / Normal Rate of Return
= Rs4800/- X 100/10 = Rs48000/-
3.9.5. **Present Value of Super Profit Method:**

Under this method Goodwill is the estimated value of the present value of future super profits.

**Step 1:** Find the Normal Profit.

Normal Profit = Capital Employed X Normal Rate of Return.

**Step 2:** Calculate Future Super Profit.

Future Super Profit = Estimated Future Profit – Normal Profit.

**Step 3:** Calculate the Present Value Factor for the expected rate of return

Formula to calculate PVF = 100 divided by 100 + expected rate of return.

For example: to calculate the PVF at 10% for Three years.

- 1st year pvf @10% is 100/110 = 0.9091
- 2nd year pvf@ 10% is 0.9091 X 100/110 = 0.8264
- 3rd year pvf @10% is 0.8264 X 100/110 = 0.7513

Similarly for pvf at 5%

- 1st year pvf @ 5% is 100/105 = 0.9524
- 2nd year pvf @5% is 0.9524 X 100/105 = 0.9070

**Step 4:** Multiply present value factor with future super profits.

**Step 5:** Goodwill = Total of all the products of pvf and super profits.

(Addition of all the values found in step four)

**Illustration 14:**

From the following details of Bashir & Sons find value of goodwill as per present value of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>150000</td>
<td>120000</td>
<td>130000</td>
<td>90000</td>
<td>110000</td>
<td>600000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>400000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.09091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td>0</td>
</tr>
</tbody>
</table>
Solution:

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>150000</td>
<td>120000</td>
<td>130000</td>
<td>90000</td>
<td>110000</td>
<td>600000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>80000</td>
<td>400000</td>
</tr>
<tr>
<td>Super Profit</td>
<td>70000</td>
<td>40000</td>
<td>50000</td>
<td>10000</td>
<td>30000</td>
<td>200000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.9091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td></td>
</tr>
<tr>
<td>PV of Super Profits</td>
<td>63637</td>
<td>33056</td>
<td>37565</td>
<td>6830</td>
<td>18627</td>
<td>159715</td>
</tr>
</tbody>
</table>

Value of Goodwill = Rs159715/-

Illustration 15:

From the following details of Bashir & Sons find value of goodwill as per present value of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>86000</td>
<td>92000</td>
<td>95000</td>
<td>97000</td>
<td>108000</td>
<td>478000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>81000</td>
<td>81000</td>
<td>81000</td>
<td>81000</td>
<td>81000</td>
<td>405000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.09091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td>0</td>
</tr>
<tr>
<td>PV of Super Profits</td>
<td>4545.5</td>
<td>9090.4</td>
<td>10518.2</td>
<td>10928</td>
<td>16764.3</td>
<td>51846.4</td>
</tr>
</tbody>
</table>

Value of Goodwill = Rs51846/-

Illustration 16:

From the following details of Bashir & Sons find value of goodwill as per present value of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>55000</td>
<td>54000</td>
<td>56000</td>
<td>60000</td>
<td>70000</td>
<td>295000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>260000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.09091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td>0</td>
</tr>
<tr>
<td>PV of Super Profits</td>
<td>4545.5</td>
<td>9090.4</td>
<td>10518.2</td>
<td>10928</td>
<td>16764.3</td>
<td>51846.4</td>
</tr>
</tbody>
</table>
Solution:

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>55000</td>
<td>54000</td>
<td>56000</td>
<td>60000</td>
<td>70000</td>
<td>295000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>52000</td>
<td>260000</td>
</tr>
<tr>
<td>Super Profit</td>
<td>3000</td>
<td>2000</td>
<td>4000</td>
<td>8000</td>
<td>18000</td>
<td>35000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.9091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td></td>
</tr>
<tr>
<td>PV of Super Profits</td>
<td>2727.3</td>
<td>1652.8</td>
<td>3005.2</td>
<td>5464</td>
<td>11176.2</td>
<td>24025.5</td>
</tr>
</tbody>
</table>

Value of Goodwill = Rs24025.5/-

Fill up the blanks:

1) Nestle is a popular ______________
2) ™ is the symbol used to represent ________________
3) Goodwill is an ______________ Asset.
4) Land is an example of ________________, Fixed Asset
5) Intangible Asset do not have a ______________ form.
6) © is the symbol used to represent _______________
7) ® is the symbol used to represent that name or logo or brand is _________ under law.
8) The headquarters for Intellectual Property organization is at ____________ in India.
9) An __________ can be Tangible or Intangible
10) Trade Secret is an example of ____________


True or False

1. The main basis of distinction between tangible and intangible asset is the physical form.
2. Furniture is an example of Tangible Asset.
3. Patent is an example of Intangible Asset.
4. Copyright is an example of an Intangible Asset.
5. It is easy to calculate the cost of Tangible Asset.
6. Intangible Assets cannot be seen, touched and felt.
7. Intangible Assets are included under Intellectual Property Rights in India.
8. Trademark is the legal right given to represent a mark, name, symbol, brand to represent one’s product and service.
9. Patent is an exclusive right given to a person or business to produce and sell the invention.

10. The premium amount paid above the actual net worth is known as Goodwill.


Q1. Define Asset.

Q2. Explain types of Intangible Assets.

Q3. Differentiate between Tangible and Intangible Assets.

Q4. Explain valuation of Trademark, Patents and Copyrights.

Q5. What is a Brand? Explain the valuation of a Brand.


Sum 1:

Following are the profits of Kamlesh Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits in Lakhs</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>60</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 3 years purchase of five years average profit.

Sum 2:

Following are the profits for five years of Aniika Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>20000</td>
<td>25000</td>
<td>30000</td>
<td>35000</td>
<td>40000</td>
<td>150000</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of five years average profit.

Sum 3:

Following are the profits of Preeti Stores.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits in Lakhs</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 3 years purchase of five years average profit.

Sum 4:

Following are the profits for five years of Unathi Stores.
<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>275000</td>
<td>450000</td>
<td>350000</td>
<td>425000</td>
<td>500000</td>
<td>2000000</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of five years average profit.

Sum 5:

Following are the profits of Bhavesh Tea Depot.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>8000</td>
<td>9000</td>
<td>12000</td>
<td>14000</td>
<td>12200</td>
<td>10800</td>
<td>66000</td>
</tr>
</tbody>
</table>

In 2016 there was an abnormal gain of Rs 4500/- and 2017 there was an abnormal loss of Rs 2200/-

Calculate the value of Goodwill on the basis of 4 years purchase of six years average profit.

Sum 6:

Following are the profits of Rohan Dairy.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>25000</td>
<td>35000</td>
<td>65000</td>
<td>35000</td>
<td>160000</td>
</tr>
<tr>
<td>Weights</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of four years weighted average profit.

Sum 7:

Following are the profits of Balan Traders.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>45000</td>
<td>38000</td>
<td>29000</td>
<td>68000</td>
<td>180000</td>
</tr>
<tr>
<td>Weights</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

Calculate the value of Goodwill on the basis of 2 years purchase of four years weighted average profit.

Sum 8:

Following are the profits of Venkat Stores.
<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>15000</td>
<td>18000</td>
<td>21000</td>
<td>25000</td>
<td>26000</td>
<td>105000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs150000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 3 years purchase of the super profits of the business.

Sum 9:

Following are the profits of Dharuwala & Sons.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>100000</td>
<td>122000</td>
<td>76000</td>
<td>98000</td>
<td>104000</td>
<td>500000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs800000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 3 years purchase of the super profits of the business.

Sum 10:

Following are the profits of M N Associates & Sons.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>80000</td>
<td>98000</td>
<td>89500</td>
<td>65300</td>
<td>42200</td>
<td>375000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs400000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 2 years purchase of the super profits of the business.

Sum 11:

Following are the profits for of KK Brothers.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>46000</td>
<td>25000</td>
<td>28000</td>
<td>42000</td>
<td>69000</td>
<td>210000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs420000/-, and the normal rate of return is 10%p.a.

Find the value of Goodwill based on 2 years purchase of the super profits of the business.

Sum 12:

The value of net assets of the business is Rs.1400000/- The business has earned an average profit of Rs160000/- for the past few years. The normal rate of return for similar type of business is 10%. Find the Value of Goodwill by capitalization method.

Sum 13:
The value of net assets of the business is Rs.540000/- The business has earned an average profit of Rs120000/- for the past few years. The normal rate of return for similar type of business is 15%. Find the Value of Goodwill by capitalization method.

Sum 14:

The value of net assets of the business is Rs.890000/- The business has earned an average profit of Rs700000/- for the past few years. The normal rate of return for similar type of business is 4%. Find the Value of Goodwill by capitalization method.

Sum 15:

From the following details of Nadar & Sons find value of goodwill as per capitalization of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>40000</td>
<td>38000</td>
<td>32000</td>
<td>40000</td>
<td>50000</td>
<td>200000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs150000/-, and the normal rate of return is 10%p.a.

Sum 16:

From the following details of Kaka Sweets find value of goodwill as per capitalization of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>260000</td>
<td>340000</td>
<td>440000</td>
<td>100000</td>
<td>100000</td>
<td>1240000</td>
</tr>
</tbody>
</table>

Capital employed in 2015 was Rs2000000/-, and the normal rate of return is 10%p.a.

Sum 17:

From the following details of Vikram Traders find value of goodwill as per present value of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>130000</td>
<td>150000</td>
<td>75000</td>
<td>95000</td>
<td>120000</td>
<td>570000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>70000</td>
<td>70000</td>
<td>70000</td>
<td>70000</td>
<td>70000</td>
<td>350000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.09091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td>0</td>
</tr>
</tbody>
</table>

Sum 18:

From the following details of Mihir & Co, find value of goodwill as per present value of super profits method.
### Sum 19:

From the following details of B & B Co, find value of goodwill as per present value of super profits method.

<table>
<thead>
<tr>
<th>Year End</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Estimated Profits</td>
<td>62000</td>
<td>65000</td>
<td>62000</td>
<td>45000</td>
<td>66000</td>
<td>300000</td>
</tr>
<tr>
<td>Normal Profit</td>
<td>42000</td>
<td>42000</td>
<td>42000</td>
<td>42000</td>
<td>42000</td>
<td>210000</td>
</tr>
<tr>
<td>PVF</td>
<td>0.09091</td>
<td>0.8264</td>
<td>0.7513</td>
<td>0.683</td>
<td>0.6209</td>
<td>0</td>
</tr>
</tbody>
</table>

References:

http://www.ipindia.nic.in/writereaddata/Portal/IPOAct/1_43_1_trade-marks-act.pdf (retrieved on 14 Nov 2019 at 7.17am)

http://legislative.gov.in/sites/default/files/A1999-47_0.pdf
