CHAPTER 9 VALUATION OF SHARES / GOODWILL

PART A: THEORY

This Chapter includes	
- Valuation of shares - Methods of valuation of shares – net asset basis or intrinsic value method, yield basis, valuation based on rate of return, valuation basis and productivity	- Special factors for valuation factor of shares - Valuation of intangible : brand, goodwill and IPRs

Chapter at a Glance

Topic	Important Highlight
1. Need for valuation of shares	The necessity for valuation of shares arises inter alia in the following circumstances : i) Purchase of a book of shares which may or may not give the holder thereof a controlling interest in the company. ii) Purchase of shares by employees of the company where the retention of such shares is limited to the period of their employment iii) Formulation of schemes of amalgamation, absorption, etc iv) Acquisition of interest of dissenting shareholders under a scheme of reconstruction v) Compensating shareholders on the acquisition of their shares by the Government under a scheme of rationalization vi) Conversion of shares, say, conversion of preference shares into equity vii) Advancing a loan on the security of shares
2. Methods of valuation of shares	
(a) Net assets basis of intrinsic value method	The method relating to net asset basis may take various forms depending upon circumstances : i) Break-up value method (or liquidation value method) ii) Appraised value method; and iii) Book value method Depending on the circumstances of the case, goodwill may or may not be included. Goodwill comes in for distinct consideration only when the number of shares involved is large giving to the holder a measure of control. Normally, earning represents the result of application of all assets of every description in the business, whether it is plant and machinery or goodwill or patent or know-how, for a small number of shares in a going concern, earning is the only appropriate basis.

(b) Yield basis	i) Valuation based on rule of return ii) Valuation based on rate of dividend Value of share $\frac{\text{Possible rate of dividend}}{\text{normal rate of dividend}}$ x paid up value per share $\frac{\text{dividend (in rupees) per share x 100}}{\text{normal rate of dividend}}$ possible rate of dividend $\frac{\text{Total profit available for dividend x 100}}{\text{Total paid up equity capital}}$ iii) Valuation based on rate of earning : Value of share $\frac{\text{Rate of earning x paid-up value per share}}{\text{Normal rate of earning}}$ Rate of earning = $\frac{\text{actual profit earned x 100}}{\text{Capital employed}}$ iv) Valuation based on price earnings ratio : Market value of share = price earnings ratio x earning per share Earning per share = $\frac{\text{profit available for equity shareholders}}{\text{Number of equity shares}}$ Price earnings ratio = $\frac{\text{market value per share}}{\text{Earnings per share}}$ v) Capitalization factor Capitalization factor = $\frac{100}{\text{Normal rate of return}}$
3. Special factors for valuation of shares	a) Importance of the size of the block of shares b) Restricted transferability c) Dividends and valuation d) Bonus and right issues
4. Valuation of preference shares	These are valued on yield basis in a going concern. Compared to equity shares, the rate of return in preference shares would be, generally, lower because of greater safety. With fluctuations in the normal rate of return in respect of preference shares, the value of preference share will fluctuate but in the opposite direction, i.e., if the normal rate of return increases, the value tends to diminish.
5. Intangible assets	Following features of intangible assets : i) It is non-physical in nature ii) It gives the specific rights to the holders over several future years iii) It is possible for multiple uses at the same time

	iv) It creates future value v) It is identifiable as non-monetary asset vi) It has limited ability to protect property rights vii) Investment in intangible assets is basically risky
6. Recognition of an expense on intangible asset	Expenditure on an intangible item should be recognized as an expense when it is incurred unless : a) It forms part of the cost of an intangible asset that meets the recognition criteria b) The item is acquired in an amalgamation in the nature of purchase and cannot be recognized as an intangible asset If this is the case, this expenditure (included in the cost of acquisition) should form part of the amount attributed to goodwill (capital reserve) at the date of acquisition. In some cases, expenditure is incurred to provide future economic benefits to an enterprise, but no intangible asset or other asset is acquired or created that can be recognized as an expense when it is incurred. For example, expenditure on research is always recognized as an expense when it is incurred. Examples of other expenditure that its recognized as an expense when it is incurred include : a) Expenditure on start up activities (start up costs), unless this expenditure is included in the cost of an item of fixed asset. Start up costs may consist of preliminary expenses incurred in establishing a legal entity b) Expenditure on training activities c) Expenditure on advertising and promotional activities; and d) Expenditure on relocating on re-organizing part or all of an enterprise.
7. Amortization on intangible assets	1. Amortization period 2. Amortization method 3. Residual value 4. Review of amortization period and amortization method
8. Factors affecting goodwill	The factors leading to goodwill are the following : 1. Special locational advantages 2. Special commercial advantages such as a long term contract for supply of raw materials at a low price or for sale of finished goods at remunerative prices 3. Advantages because of prior entry specially if later is very difficult 4. Advantages enjoyed by it because of certain patents available to it 5. Technical know-how possessed by the firm 6. The research and development effort
9. Methods of valuing goodwill	There are basically two methods of valuing goodwill : i) Average profits method ii) Super profits method

❖ PHASES OF GENERATION OF INTANGIBLE ASSETS

S. No.	Heading	Description
1.	**Meaning**	Identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services for rental to others or for administrative purposes
2.	**Classification of phases**	Internally generated goodwill should not be recognized as an asset. The generation of asset is classified into two phases : a) Research phase : expenditure on research should not be recognized as an intangible asset. These should be recognized as an expenses when it is incurred. b) Development phase : an intangible asset arising from development phase should be recognized only if following conditions are fulfilled. - The technical feasibility of completing the intangible asset so that it will be available for use or sale - Its intention to complete the intangible asset and use or sell it - Its ability to use or sell the intangible asset - The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset

❖ PURPOSES OF VALUATION OF SHARES

S. No.	Heading	Purposes of valuation of shares
1.	**Purpose of valuation of shares**	The valuation of shares may arise under the following circumstances :
(a)	**Taxation**	Assessment under various direct tax laws
(b)	**Controlling interest**	Purchase of block of shares generally involving acquisition of controlling interest in the company.
(c)	**Purchase by employees**	Purchase of shares by employees of the company
(d)	**Formulation of company**	Formulation of schemes of amalgamation, absorption etc.
(e)	**Acquisition of interest**	Acquisition of interest of dissenting shareholder under a scheme of reconstruction.
(f)	**Advancing loans**	Advancing loans on the security of shares
(g)	**Conversion**	Conversion of shares say preference into equity
(h)	**Deadlock resolution**	Resolving a deadlock in the management of a private limited

		company on the basis of the controlling block of shares being given to either of the parties.
(i)	**Compensation from Government**	Compensating shareholders on the acquisition of their shares by the government under a scheme of rationalization.

❖ FAIR VALUE OF SHARES

S. No.	Heading	Fair value of shares
1.	**Meaning**	- Fair value of the current price or value of an item. More specifically, it is the amount that the item could be sold for that is fair for both the buyer and the seller. - Fair value does not relate to products being sold in liquidation; rather it refers to products that are being sold under normal, reasonable conditions - Fair value becomes increasingly important when assets are sold or a company is acquired.
2.	**Method of valuation**	
i)	**Net asset or intrinsic value or net worth or breakup value method**	In this method value per share is arrived by dividing the net asset of the company by number of equity shares. The calculation of net asset is done by adding all the asset at the market value, net investments are included and if there is preference share capital it should be deducted from it. For example : land and building + plant and machinery + furniture + stock + debtors + bill receivable + cash + goodwill – debentures – current liabilities – preference share capital – dividend arrears / number of equity shares.
ii)	**Yield or earning capacity valuation or income method**	In this method the valuation of share is done by comparing expected rate of return with normal rate of return. If ERR > NRR than market value of share is more than the paid up amount. Otherwise market value of share is less than the paid up value.
iii)	**Fair value or dual method**	This method is the combination of both the above methods. Fair value of share = intrinsic value + yield value / 2 This method is also known as dual method of share valuation. This method attempts to minimize the demerits of both the methods.

❖ SUPER PROFIT METHOD OF VALUATION OF GOODWILL

S. No.	Heading	Description
1.	**Meaning**	Super profit is the excess of estimated future maintainable profits over normal profits. An enterprise may possess some advantages which enable it to earn extra profits over and above the normal profit that would be earned if the capital of the business was invested in some other business with similar risks. The goodwill under this method is ascertained by multiplying the super profits by certain number of year's purchase.
2.	**Information require**	Under this method of valuing goodwill would require the following information : - A normal rate of return for representative firms in the industry - The fair value of capital employed - Estimated future maintainable profit
3.	**Calculation steps**	- Calculate capital employed (it is the aggregate of shareholders' equity and long term debt or fixed assets and net current assets) - Calculate normal profits by multiplying capital employed with normal rate of return - Calculate average maintainable profit - Calculate super profit as follows : Super profit = average maintainable profits – normal profits - Calculate goodwill by multiplying super profit by number of year's purchase

2017 – June [2] (c) Write a short note on valuation of shares bases on price earnings ratio. (3 marks)

Answer :

S. No.	Heading	Description
1.	**Meaning**	This method is suitable for ascertaining the market value of shares which are quoted on a recognized stock exchange
2.	**Calculation of price earnings ratio**	According to this method, the shares are valued on the basis of earning per share multiplied by price earnings ratio. Thus, Market value of share = Price earnings ratio x earning per share Earning per share = $\frac{\text{Profit available for equity shareholders}}{\text{Number of equity shares}}$ Price earnings ratio = $\frac{\text{Market value per share}}{\text{Earning per share}}$

❖ INTERNALLY GENERATED INTANGIBLE ASSETS IN THE BOOKS OF ACCOUNT

S. No.	Heading	Description
1.	**Meaning**	- Internally generated assets like goodwill are recognized in the books of accounts of the internally generated intangible assets meets the criteria for recognition. - An enterprise should distinguish the generation of the asset into the research phase and the development phase. If the enterprise cannot make such distinction, then expenditure on that project should be considered to be in the research phase only.
2.	**Classification of phases**	➢ Research phase : intangible asset arising from research or on the research phase of an internal project should be recognized as an expenses when it is incurred. ➢ Development phase : an intangible assets arising from development phase of an internal project should be recognized only if, an enterprises can demonstrate of the following conditions : - The technical feasibility of completing the intangible asset so that it will be available for use or sale - Its intention to complete the intangible asset and use or sell it - Its ability to use or sell the intangible asset - How the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, If it is to be used internally, the usefulness of the intangible asset - The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and - Its ability to measure the expenditure attributable to the intangible assets during its development reliably. Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance should not be recognized as intangible assets.

❖ AMORTIZATION PERIOD IN RELATION TO INTANGIBLE ASSETS

Heading	**Provision for Amortization on intangible assets**
Amortization on intangible assets	- The depreciable amount of an intangible asset should be allocated on a systematic basis over the best estimate of its useful life. - There is a rebuttable presumption that the useful life of an intangible asset will not exceed ten years from the date when the asset is available for use. - Amortization should commence when the asset is available for use - As the future economic benefits embodied in an intangible asset are consumed over time, the carrying amount of the asset is reduced to reflect that consumption. - This is achieved by systematic allocation of the cost of the asset, less any residual value, as an expense over the asset's useful life. Amortization is recognized whether or not there has been an increase in, for example, the asset's fair value or recoverable amount. - Given the history of rapid changes in technology, computer software and many other intangible assets are susceptible to technological obsolescence - Therefore, it is likely that their useful life will be short - If control over the future economic benefits from an intangible asset is achieved through legal rights that have been granted for a finite period, the useful life of the intangible asset should not exceed the period of the legal rights unless the legal rights are renewable and renewal is virtually certain.
Review of amortization period and amortization method	- The amortization period should be reviewed at least at each financial year end - If the expected useful life of the asset is significantly different from previous estimates, the amortization period should be changed accordingly.
Retirement and disposal	An intangible asset should be derecognized or disposal or when no future economic benefits are expected from its use and subsequent disposal.

❖ METHODS FOR VALUATION OF GOODWILL

✓ SUPER PROFIT METHOD

Goodwill	Super Profit X No. of years of purchase
Super Profit	Average Profit – Normal Profit
Normal Profit	Average Capital Employed X NRR
Average Profit Average Capital Employed NRR	Note I Note II Note III

Note I: Average Profit

For the purpose of Goodwill Valuation, problem provides past profits

If any adjustments are given year wise, then we should complete such adjustments before calculating average profits

After completing the adjustments, we have to observe the trend to decide whether to calculate Weighted Average or Simple Average

If the profits show rising trend, prefer weighted average. If the profits shows declining trend or uneven trend, prefer Simple Average

If there is a loss in a particular year and the sum is silent regarding the same i.e. loss is not justified or quantified, then ignore the loss making year.

Adjustments

a) **<u>Non Operating & Non Recurring Elements</u>**
Loss by fire, theft, any natural calamity
Profit on sale of fixed assets
Profit on sale of investments

b) **<u>Non Operating & Recurring Elements</u>**
Interest received on Non Trade Investments
Dividend received on Non Trade Investments
Rent received by letting out part of business premises

✓ **Future Adjustments**

After the above adjustments are over, we have to adjust the profits with respect to future adjustments also:

a) Expenses incurred so far but not likely to be incurred in future

b) Expenses not incurred so far but likely to be incurred in future

c) Incomes received so far but not likely to be received in future

d) Incomes not received so far but likely to be received in future

✓ After completing all the adjustments with respect to past, present and future, the profits so arrived are called as **Future Maintainable Profits (FMP)**

✓ So basically Average Profits are also known as Future Maintainable Profits (FMP)

Note II: Average Capital Employed

- Closing Capital Employed = Assets
- Assets should not include Goodwill, Non Trade Investments, Fictitious Assets
- Liabilities should only include external liabilities such as Secured Loans, Unsecured Loans, Current Liabilities, Provisions
- Assets and Liabilities should be taken at revised values and if revised values are not given in the question, then take book values
- **Normally, Closing Capital Employed = Average Capital Employed**
- But if in the Balance Sheet, proposed dividend is given, then ½ of profits should be deducted while calculating average capital employed.

Note III: Normal Rate of Return (NRR)

- NRR is also called as expected rate of return, fair rate of return on capital invested, standard return in similar business of similar industry
- NRR will always be given in the question
- If NRR is given with some risk factor, then NRR = Given % + % of Risk Factor
- NRR based on Dividend Basis (Dividend Yield Ratio)

  $$NRR = \frac{DPS}{MPS} \times 100$$

- NRR based on Yield Basis (Earnings Yield Ratio)

  $$NRR = \frac{EPS}{MPS} \times 100$$

✓ ANNUITY METHOD

Goodwill = Super Profit X Annuity Value

✓ CAPITALISATION OF SUPER PROFIT

$$\text{Goodwill} = \frac{\text{Super Profit}}{\text{NRR}}$$

✓ CAPITALISATION OF AVERAGE PROFITS (FMP)

$$\text{Goodwill} = \frac{\text{Average Profit}}{\text{NRR}} - \text{Actual Capital Employed}$$

METHODS FOR VALUATION OF SHARES

INTRINSIC VALUE METHOD

It is also known as

- Liquidation Method
- Balance Sheet Method
- Asset Backing Method
- Net Assets Method

Value Per Share	$\frac{\text{Net assets for ESH}}{\text{No. of Equity Shares}}$

How to calculate Net Assets for Equity Shareholders (ESH)	
Closing Capital Employed as per Goodwill	XX
Add: Goodwill	XX
Add: Non Trade Investments	XX
Less: Preference Share Capital	(XX)
Net Assets for Equity Shareholders (ESH)	**XX**

If in the question, Premium on Redemption is given or Proposed Preference Dividend is given or arrears of Preference Dividend is given, then the same should also be deducted while calculating **Net Assets for Equity Shareholders (ESH).**

YIELD VALUE METHOD

It is also known as

- Profitability Method
- Going Concern Method
- Productivity Method

Value Per Share	$\frac{\text{ARR}}{\text{NRR}}$ X Paid up value or Face value

How to calculate Average Rate of Return (ARR)	
ARR	$\frac{\text{Average Profits for ESH}}{\text{Paid up Equity Share Capital}} \times 100$

Average Profits for Equity Shareholders (ESH)	
Average Profits as per Goodwill	XX
Less: Transfer to reserves	(XX)
Less: Preference Dividend	(XX)
Average Profits for Equity Shareholders (ESH)	**XX**

✓ FAIR VALUE METHOD

Value Per Share	$\frac{\text{Intrinsic value per share + Yield value per share}}{2}$

PART B: PRACTICAL

VALUATION OF GOODWILL

Q.1. The net profit of a business after providing for taxation, for the past five years are: ` 40,000, ` 42,500, ` 46,000, ` 52,500 and ` 59,000. The capital employed in the business is ` 4,00,000. The normal rate of return expected in this type of business is 10%. It is expected that the company will be able to maintain its-super profit for the next 5 years.

Calculate the value of goodwill on the basis of:

(i) Five years' purchase of super profits;

(ii) Annuity method, taking the present value of annuity of Re. 1 for five years at 10% as 3.78; and

(iii) Capitalisation of super profits.

VALUATION OF SHARES

Q.2. Balance Sheet of Diamond Ltd. on 30th June, 2020

Liabilities	`
Share capital:	
2,000 shares of Rs.100 each	2,00,000
General reserve	40,000
Profit and loss account	32,000
Sundry creditors	1,28,000
Income Tax provision	60,000
	4,60,000
Assets	`
Land and Buildings	1,10,000
Plant and machinery	1,30,000
Patents and trade marks	20,000
Stock	48,000
Debtors	88,000
Bank balance	52,000
Preliminary expenses	12,000
	4,60,000

The expert valuer valued the land and buildings at ` 2,40,000, goodwill at ` 1,60,000 and Plant and Machinery at ` 1,20,000. Out of the total debtors, it is found that debtors of `8,000 are bad. The profits of the company have been as follows:

Years	`
2016	80,000
2017	90,000
2018	1,06,000

The company follows the practice of transferring 25% of profits to general reserve. Similar type of companies earn at 10% of the value of their shares.

<u>Ascertain the value of shares of the company under:</u>

(i) Intrinsic value method.

(ii) Yield value method; and

(iii) Fair value method.

Ignore taxation. Note: Assume that depreciation is charged on land & Building at 10% & plant at 15%.