VALUATION OF GOODWILL

Goodwill is an intangible asset. Intangible asset means a capital asset having no physical existence. As per AS-26: *Intangible Assets, an intangible asset is an 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.* The value of an intangible asset is dependent on the rights that possession confers upon the owner. Intangible assets, being capital assets, are non-current. They are expected to benefit an enterprise beyond one year or the current operating cycle of the business. However, there is usually high degree of uncertainty regarding the value of the future benefits to be received from intangible assets. Thus, goodwill is a capital asset. It represents benefits that are highly uncertain. Goodwill is not a fictitious asset.

DEFINITION OF GOODWILL

Goodwill is an intangible asset but not fictitious. It contributes to the profit earning capacity of the business. Goodwill is a valuable asset if the enterprise is earning profits and it is a valueless asset if the enterprise is incurring losses.

Lord Macnaughton in *IRC* v. *Muller* (1901) defined goodwill as follows:

> "Goodwill 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. It is the attractive force which brings in custom. It is one thing which distinguishes an old established business from a new business at its first start. Goodwill is composed of a variety of elements. It differs in its composition in different trades and in different businesses in the same trade. One element may preponderance here and another there".

According to **Spicer and Pegler** "Goodwill may be said to be that element arising from the reputation, connection or other advantages possessed by a business which enables it to earn greater profits than the return normally to be expected on the capital represented by the net tangible assets employed in the business."

Kohler defines goodwill as "current value of expected future income in excess of a normal return on the investment in net tangible assets..."

Statement of Standard Accounting Practices (SSA-22), UK Accounting Standard on Accounting for goodwill defines the term goodwill as follows:

"Goodwill is the difference between the value of a business as a whole and the aggregate of the fair value of its separable net assets." Separable net assets are those which can be identified and sold separately without selling the business as a whole.

From the accountants point of view, goodwill, in the sense of attracting custom has little significance unless it has a saleable value.

The following three major conceptions of goodwill appear frequently in the accounting literature:

(1) *Valuation of favourable attitudes towards the firm:* According to this conception, goodwill is thought to arise from advantageous business relationships, good relations with employees and a favourable attitude of the customers.

(2) *Present value of superior earnings:* According to this conception, goodwill is the present discounted value of expected future earnings in excess of that which may be considered as a normal return.

(3) *Master valuation concept :* According to this, goodwill is the excess of the value of the business as a whole over the valuation attaching to its individual tangible and intangible net assets.

CHARACTERISTICS OF GOODWILL

The following are the main characteristics of goodwill

1. **Goodwill is an intangible asset:** Being an intangible asset, it has no physical existence and represents future benefits which are highly uncertain.

2. **Goodwill contributes to the earning capacity of the business:** It enables a business enterprise to earn more than normal profits. It is a valuable asset if the enterprise is earning profits and it is valueless if the enterprise is incurring losses.

3. **Individual factors which contribute to goodwill cannot be valued:** There are many factors which contribute to goodwill but they cannot be separately valued.

4. **Value of goodwill may fluctuate widely:** The value of goodwill may fluctuate widely accordingly to the internal and external circumstances over a relatively short period of time.

5. **Assessment of goodwill is highly subjective:** It is very difficult to calculate the correct value of goodwill. Assessment of goodwill is highly subjective. However, when the purchase price of a going concern business exceeds the sum of the valuations of all individual assets other than goodwill, the excess may be assumed to be goodwill.

6. Goodwill is incapable of realisation separately: Goodwill is incapable of realisation separately from the business as a whole. Thus, goodwill is not a separable asset.

7. Goodwill has indeterminate life: Goodwill is an asset with indeterminate life and therefore, should be written off over a certain period.

8. Goodwill is a non-monetary asset: Goodwill is not a monetary asset. In case of monetary assets a fixed and determinable amount of money is to be received.

TYPES OF GOODWILL

Goodwill may be of two types:

1. Inherent Goodwill
2. Purchased Goodwill

Inherent Goodwill: Inherent goodwill is generated internally. Since goodwill represents advantages not specifically identifiable when acquired in the normal course of business it should not be recorded as an asset even though future periods will be benefited. According to Elden S. **Hendriksen,** the "main reasons for this practice are the inability to identify and measure the goodwill created each period and the absence of any logical method of associating these costs with any specific revenue in future periods." **As per AS-26, internally generated goodwill should not be recognised as an asset because it is not an identifiable resource controlled by the enterprise that can be measured reliably at cost.**

Purchased Goodwill: Goodwill may be acquired while purchasing a concern. Purchased goodwill is the excess of the purchase consideration over the fair value of the separable net assets acquired. In other words, when a business as a whole is acquired by another business enterprise, the excess of the price paid in shares or other assets over the fair value of the separable tangible and intangible assets acquired *less* liabilities taken over, represents the amount paid for goodwill.

As per pre revised AS-10: 'Accounting for Fixed Assets' states : "*Goodwill should be recorded in the books only when some consideration in money or money's worth has been paid for it. Whenever a business is acquired for a price (payable in cash or in shares or otherwise) which is in excess of the value of the net assets of the business taken over, the excess should be termed as 'goodwill'.*"

METHODS OF VALUATION OF GOODWILL

The following are the methods of valuation of shares :

1. Average Profit Method
2. Super Profit Method (or Non-time Adjusted Super Profit Method)
3. Annuity Method (or Time Adjusted Super Profit Method)
4. Capitalisation of Super Profit Method
5. Capitalisation Method or Capitalisation of Future Maintainable Profit Method

1. Average Profit Method

When a person makes payment for goodwill, he pays for earning profits in future. Therefore, future maintainable profit is one of the most important basis for valuation of goodwill. Under this method, goodwill is ascertained by multiplying the future maintainable profits *(i.e.,* adjusted average past profits) by the number of years' purchase. The formula is:

Goodwill = Future Maintainable Profits × Number of Years' Purchase.

Concept of Future maintainable Profit. It is one of the most important factor in valuation of goodwill. Future maintainable profit is calculated taking either simple or weighted average of the past profits or by fitting trend line. *Generally, profits of past 3 to 5 years are taken into consideration.* In case the business is subject to cyclical fluctuations, the number of past years selected should be long enough to cover the full business cycle. However, under the present inflationary conditions, usually a shorter period of 3 years may be selected. In case of unusual circumstances such as, sharp decrease in demand for the product, the profit of one year may be a better indication of future earnings. The purpose of averaging the past profits is to ascertain the future maintainable profits *i.e.,* the profits likely to be earned in future. Apart from averaging, the past profits are also adjusted to project the future earnings.

For estimating future maintainable profits, the following adjustments are made in the past profits:

(*a*) **Elimination of abnormal loss** arising out of strikes, lock-out, fire, earthquake, flood, etc. Similarly, if abnormal gain has been included in past profits, it should be eliminated.

(*b*) **Elimination of interest/dividend or any other income from non-trading assets** as the 'capital employed' used for valuation of goodwill in case of methods based upon super profit comprises only of trading assets.

(c) **Adjustment should be made for change in the rate of tax.** If there is change in the rate of tax, tax charged at the old rate should be added and the tax should be charged at the new rate.

(d) **Neutralise the effect of change in accounting policy.** For example, if the company has followed Weighted Average method of inventory valuation and Straight Line method of depreciation for the years ending on 31st March, 2010, 2011 and 2012 and thereafter adopted the FIFO method of inventory valuation and Written Down Value method of depreciation for the year ending on 31st March, 2013 and 2014, the profits should be recomputed for the year ending on 31st March, 2010, 2011 and 2012 applying the new methods of valuation of inventory and depreciation if the average of these five years is to be calculated for estimating future maintainable profits. Similarly the change in accounting policy relating to exchange rate, subsidy received from the Government should be adjusted.

(e) **Elimination of any capital profit or loss** which has been taken into consideration while ascertaining the past profits or loss.

(f) **Adjustment for inadequate provision** for bad debts, depreciation, taxation etc.

(g) **Adjustment for any remuneration, commission, etc.** foregone by the directors and others.

(h) **Adjustment for actual expenses and losses not likely to occur in future.** These should be added back to past profits. Similarly all income included in past profits and not likely to be earned in future are deducted from past profits.

(i) **Adjustments for expenses likely to be incurred in future.** These should be deducted from past profits. Similarly, all income likely to arise in future are added to the past profits.

(j) **Adjustment for discontinuance of part of business and expansion programme.**

(k) **Adjustment for Indian and global business environment.**

Concept of Number of Years' Purchase: Logic for multiplying the future maintainable profit (or super profit in case of Super Profit Method) by number of years' purchase is that *purchaser of the business should hand over to the seller of the business the profits of the business which the buyer would earn from the business due to seller's efforts.* For some years after the purchase of business the profits are earned due to the seller's goodwill before the buyer's efforts begin to get recognition from customers. Therefore, the purchaser compensates the seller for a few years profits which the purchaser gets due to efforts made by the seller earlier. Goodwill is usually calculated at 3 to 5 years' purchase.

Note : Number of years' purchase is management estimate and it is usually given in the question. If the number of years' purchase is not given and the question requires the calculation of goodwill by super profit method, assume number of years' purchase between 3 to 5 years' purchase.

2. Super Profit Method (or Non-time Adjusted Super Profit Method)

Excess of future maintainable profit over normal profit is called Super Profit. Future maintainable profit has already been explained. Normal profit is based upon normal rate of return and average capital employed. *Under this method, goodwill is calculated at a certain number of years' purchase of super profit.* Thus, goodwill is the aggregate super profit of the future years for which such profit is expected to be maintained. This method ignores the time value of money. If nothing is mentioned in the question regarding the method of valuation of goodwill but the factors on which the valuation of goodwill is dependent under this method are given, this method should be applied. The formula is :

Goodwill = Super Profit × Number of years' Purchase

OR

Goodwill = (Future Maintainable Profits - Normal Profits) × Number of Years' Purchase

Where,

Normal Profits = Average Capital Employed × Normal Rate of Return (after tax)

The valuation of goodwill under this method depends upon *(i)* Future maintainable profits, *(ii)* Average capital employed, *(iii)* Normal rate of return and *(iv)* period for which super profit is projected.

Normal Rate of Return

It comprises of (*i*) the pure interest rate prevailing in the concerned economy and *(ii)* the premium for business risk appropriate for the industry to which the firm/company belongs. The pure interest rate or risk-free rate is the rate of return on long-term government securities or fixed deposits in bank. The premium for business risk or risk rate of return differs from industry to industry. If the industry is well established and earning profits steadily, low normal rate of return will satisfy the entrepreneur/investors although it will be higher than the risk-free or pure interest rate. Higher the business risk, higher will be the normal rate of return. An investor in government securities may be satisfied with 8% yield on his investment; he may expect, say, 20% if he invests in equity shares of a new company but, in case the company is well established and yielding profits steadily, he may be content with only 15%. It must be noted that business risk differs from firm to firm in the same industry. The normal rate of return is also affected by the period for which investment is to be made. Longer the period, the higher the expected rate of return. The general economic and political situation also affect the normal rate of return,

Calculation of Average Capital Employed : For the purpose of valuation of goodwill by methods based upon super profit the use of average capital employed is preferred over closing capital employed. This is because the capital employed must be such as may fairly represent the capital employed throughout the year.

Case I: *Where only one year's assets and liabilities are given. In this case average capital employed is calculated as given below:*

$$\text{Average Capital Employed} = \frac{\text{Capital Employed in the beginning} + \text{Capital Employed at the end}}{2}$$

3. Annuity Method (or Time Adjusted Super Profit Method or Present value of Super Profit Method)

Annuity method is a refinement of super profit method. In ease of super profit method goodwill is valued by multiplying the super profit by number of years for which super profit is expected to be maintained. It should be noted that super profit is expected to arise at different intervals of time. According to annuity method it is not logical to multiply super profit by the number of years for which super profit is expected to maintained. **Therefore, future values of super profit should be discounted using appropriate discount factor otherwise there will be heavy loss of interest. According to the annuity method goodwill should be equated to the present value of future extra profits expected to be earned discounted at the normal rate of return.** For example, suppose super profit of a firm is ₹ 10,00,000 and normal rate of return is 10% and super profit is expected to be maintained for 4 years (or fours years' purchase is considered enough). According to the super profit method; goodwill will be valued at ₹ 40,00,000. The assumption is that the goodwill paid by the buyer to the seller can be recovered by extra profit to be earned over a four-year period. But how can ₹ 40,00,000 paid immediately be equal to ₹ 10,00,000 received annually over four years. There will be heavy loss of interest to the buyer. **Therefore, annuity method advocates that goodwill should be equal to the present value of super profits expected to be earned over four-year period discounted at the normal rate of return.** Annuity tables show that ₹ 1 paid for 4 years at 10% rate of interest equal to ₹ 3.170 immediately. Therefore, goodwill as per annuity method would be ₹ 31,70,000 (i.e. ₹ 10,00,000 × 3.170). The formula is:

Goodwill = Super profit × Present value factor for number of years' purchase

If the reference to annuity tables is not given, it can be calculated using the following formula:

$$\text{Present Value of Annuity for ₹ 1} = \frac{1 - \left(1 + \frac{r}{100}\right)^{n}}{\frac{r}{100}}$$

Where r = normal rate of return

and n = number of years

ILLUSTRATION 16

4. Capitalisation of Super Profit Method

Under this method, the value of goodwill is calculated by capitalising the super profit at the normal rate of return. This is based on the assumption that super profit will continue for indefinite period in future. In other words, this method attempts to ascertain the amount of capital required to earn the super profit. In this method time value of money is ignored. The formula is:

$$\text{Goodwill} = \frac{\text{Super Profit}}{\text{Normal Rate of Return}}$$

Note: This method can also be adopted when number of years' purchase is not given in the question and the question is silent about the method of valuation of goodwill.

5. Capitalisation Method (or Capitalisation of Future Maintainable Profit Method)

Under this method future maintainable profit is capitalised applying the normal rate of return and from such value actual closing capital employed is deducted to arrive at the value of goodwill. The capitalised value of future maintainable profit is called normal capital employed or capitalised value of business. In this method time value of money is ignored. The formula for calculating goodwill is :

Goodwill = Capitalised Value of Business (or Normal Capital employed) - Actual Closing Capital Employed

Where, Capitalised Value of Business (or Normal capital employed)

$$= \frac{\text{Future Maintainable Profits}}{\text{Normal Rate of Return}}$$

$$\text{Thus Goodwill} = \left(\frac{\text{FMP}}{\text{NRR}}\right) - \text{Actual Closing Capital Employed}$$

Thus, the factors which are to be taken into consideration for valuation of goodwill under this method are: *(i)* Future maintainable profit; *(ii)* Normal rate of return in the industry to which the business enterprise belongs and *(iii)* Actual capital employed in the business enterprise. Under capitalisation method, the actual capital employed is taken as at closing balance sheet date.

VALUATION OF SHARES

NECESSITY OR OBJECTIVES OF VALUATION OF SHARES

The necessity for valuation of share arises in the following circumstances :

1. **Open Offers:** Open offers by multinational companies to convert Indian arms into wholly owned subsidiaries or to hike their holdings in Indian arms. Open offers were made at a substantial premium to the ruling market price in respect of shares of Carrier Aircon, Fujitsu ICIM, Duphar Interfan, Otis Elevators, Clariant India. Thomak Cook and Kvaerner Cement.

2. **Buy-back of Shares**: The companies which bought back the shares in the years 2000 and 2001 include Bajaj Auto, Raymond, Great Eastern Shipping and Kesonam.
3. **Formulation of schemes of amalgamation:** There is need of valuation of shares at the time of formulation of scheme of amalgamation. For example on a global scale, Glaxo Wellcome and SmithKline Beecham merged and formed a new company Glaxo SmithKline on 27th December, 2000. In India also Glaxo India Ltd. and SmithKline Beecham also merged. Similarly Bank of Madurai merged into ICICI and Bank of Rajasthan also merged into ICICI Bank.
4. **Purchase of block of shares :** There is need of valuation of shares at the time of purchase of block of shares for the purpose of acquiring controlling interest or as investment in another company.
5. **Conversion:** Need for valuation of shares at the time of conversion of preference shares/debentures into equity shares.
6. **Acquisition of interest of dissenting shareholders:** There is need for valuation of shares at the time of acquisition of interest of dissenting shareholders under a scheme of amalgamation or reconstruction.
7. **Nationalisation :** There is need for valuation of shares for compensating shareholders by the Government under a scheme of nationalisation.
8. **Advancing loan :** There is need for valuation at the time of advancing loan on the security of shares.
9. **Resolving deadlock :** Need for valuation of shares arises for resolving deadlock in the management of a private limited company so that controlling interest may be given to either of the parties.

Limitation of Stock Exchange Price as a basis of Valuation of Shares

Buyers and sellers of shares at the stock exchange deal in shares with different motives—some to invest, some to speculate, some to rig and some to take control of a company. They react depending upon their motives and that results in stock exchange quotations. Stock exchange is the important source of quotations of share price especially for small block of shares. **But the stock exchange quotations are not reliable basis of valuation of shares as they are determined on the basis of demand and supply of shares on a particular day. There are sometimes wild fluctuations in the share prices on the same day.** The share prices at the stock exchange are affected not only by company's assets and earning potential but by a number of other factors outside the business. There are bullish and bearish phases at the stock market. **The stock exchange quotations do not represent the valuation of a company by reference to its assets and earning potential.**

The Council of the London Stock Exchange has opined "We *desire to state authoritatively that stock exchange quotations are not related directly to the value of a company's assets, or to the amount of its profits and consequently these quotations no matter what date may be chosen for reference, cannot form a fair and equitable, or rational basis for compensation.* The stock exchange does not determine the price of which the official list is the record. The stock exchange may be likened to a *scientific recording instrument which registers,*

not its own actions and opinions, but the actions and opinions of private and institutional investors all over the country and, indeed the world. These actions and opinions are the results of hope, fear, guesswork, intelligent or otherwise, good or bad investment policy and many other considerations. *The quotations that result definitely do not represent a valuation of a company by reference to its assets and its earning potentials."*

Valuation of shares by an expert becomes necessary when : (*i*) Shares are not quoted, (*ii*) shares relate to private limited companies; (*iii*) the court so directs; (*iv*) Articles of Association or relevant agreement provides for valuation; (*v*) a large block of shares are to be transferred; (*vi*) statutes so requires.

FACTORS AFFECTING VALUATION OF SHARES

Factors which affect the value of shares are explained below :

1. Present and Potential Profitability of the Company: The present and expected profitability of the company is one of the most important factor affecting the value of shares. If the earnings of the company is high as compared to normal rate of return, the share price will also be high. The following points should be taken into consideration is this regard : (*a*) average profits earned by the company from trading operations and (*b*) future growth in profitability—positive or negative; (*c*) normal rate of return on capital employed.

2. Yield from other Similar Companies: The yield or return expected by investors from similar companies in the same industry also affect the value of shares.

3. Dividend Policy: Dividend Policy of the company has an important effect on value of shares. Therefore, most of the multinational companies which have steady dividend distribution policy usually command high price-earning ratio.

4. Net Assets: Although earnings potential play a major role in valuation of shares, a solid net assess *position backing indicate good safety margin.* For a company which is going to be liquidated soon, net assets form the basis for valuation of shares.

5. Corporate Governance: The company, such as Infosys Limited which has a track record of good corporate governance commands high price-earning ratio.

6. Restricted Transferability: In case of restriction on transfer of shares, the shares are valued at a relatively less price. Quoted shares of good companies are preferred by investors.

7. Reputation of Management: The shares of reputed companies with efficient management command relatively high price.

8. Financial Ratios: The companies with good financial ratios such as debt-equity ratio, return on net worth, operating profit ratio are favoured by investors.

9. The Size of Block of Shares offered for Sale: Valuation of identical shares of a company may vary at the same time depending upon the size of the block of shares under negotiation. A controlling interest usually carries a separate substantial value. For example in 2001 Cadila Health Care acquired controlling interest at ₹ 650 per share in German Remedies when the ruling market price was around ₹ 400 per share.

10. Bonus and Right Issues: Share values usually go up when bonus or right issues are announced as there is an immediate prospect of gain to the holder specially in case of good companies which try to maintain the rate of dividend even after the bonus issue.

Similarly on the announcement of right issue share price affected in the short-term if the existing shareholders are offered right shares at attractive price.

11. **Government Policy:** The Government may offer special incentives for growth of a particular industry in the form of tax holidays, duty drawbacks, favourable excise duty and custom duty, etc. The Government may give tax concessions for setting up industries in a particular region or zone. These incentives and tax concessions are reflected in the bottom line of the companies concerned and thus helps in increasing the value of shares of those companies.

12. **Composition of customers of the products of the company:** In case the company is dependent as compared to a number of customers on single or a few customers for its products, there is relatively more business risk.

13. **Reputation and market share of the company's products:** If the products of the company enjoy good reputation in the market, the value of share will be high. Similar will be the effect if the company is strategically located and has a good market share.

14. **Political and Economic Environment:** In case political and economic conditions are not good there will be adverse effect on the value of share prices.

15. **Regulatory Concerns:** Regulatory concerns like US FDA in case of pharmaceutical industry affect the valuation of shares.

METHODS OF VALUATION OF SHARES

There are basically two bases of valuation of shares. They are :

1. Net Assets Basis
2. Yield or Earnings Basis

VALUATION OF SHARES—NET ASSETS BASIS

Valuation of shares based on net assets assumes that if the company is hypothetically liquidated, then how much amount per share the shareholders are expected to receive. The value calculated as per this method is called "intrinsic value" or "net assets value" or "break up value". All assets and liabilities should be taken into consideration after their revaluation, rectification and change in accounting policy.

$$\text{Intrinsic value per share} = \frac{\text{Value of net assets available for equity shareholders}}{\text{Number of equity shares}}$$

Value of net assets available for equity shareholders is calculated as follows:

		₹
Sundry Assets (individually)		XXX
Less : Sundry Liabilities (individually)		XXX
		XXX
Less : Preference share capital	XXX	

Arrears of preference dividend*	XXX	
Proposed dividend on equity and preference shares	XXX	XXX
Assets available for equity shareholders (before considering notional call)		XXX
Add : Notional call on partly paid shares		XXX
Assets available for equity shareholders (after considering notional call)		XXX

If the amount of net assets available for equity shareholders (after notional call) is divided by number of equity then resultant figure is intrinsic value of fully paid up equity share. This will be ex-dividend value of an equity share. For calculating cum-dividend price add dividend per equity share to the ex-dividend value.

Thus, valuation of equity shares on net assets basis involves the following three steps:

(*a*) Valuation of assets;

(*b*) Ascertainment of payable value of liabilities; and

(*c*) Determination of value of fully paid up and partly paid up equity shares.

(*a*) Valuation of assets: Both current as well as non-current, whether tangible or intangible, are taken into consideration for valuation of shares. If the company is about to be liquidated, assets should be valued at their net realisable values.

If the company is a going concern, the assets should be valued as per the following criteria:

(*i*) ***Value of tangible fixed assets:*** Tangible fixed assets should be valued at their current cost, *i.e.*, the current entry price. It is the price at which the company can acquire such assets at their present locations and conditions.

(*ii*) ***Value of intangible fixed assets:*** Intangibles should be valued at their current cost. Although inherent goodwill is not shown in the books, *the valuation of goodwill is must for the valuation of shares by net assets method.* It should preferably be valued on the basis of number of years' purchase of super profit method or annuity method or capitalisation of future maintainable profit method. If the purchased goodwill appears in the books even then the goodwill should be valued for the purposes of valuation of shares by net assets method.

(*iii*) ***Investments:*** *Sundry* assets includes non-trade investments also for the purpose of valuation of shares. Shares and other securities which are quoted on regular basis should be valued at their market price. Investments which are not quoted may be valued after adjustment of their known loss or gain.

(*iv*) ***Inventories:*** Finished goods may be valued at market price and raw materials, stores, and work-in-progress should be valued at cost. Due allowance should be made for obsolete items.

(*v*) ***Sundry debtors:*** Sundry debtors should be valued after making provision for bad and doubtful debts.

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* Subject to Articles of Association and Terms of Issue of Preference Shares.

(*vi*) ***Capital work-in-progress:*** For valuation of capital work-in-progress, *i.e.*, expenditure incurred on execution of new project a conservative approach should be followed to assess the current cost.

(*vii*) ***Fictitious assets:*** Fictitious assets such as deferred revenue expenditure not written off and debit balance of profit and loss account (or negative balance in the Statement of Profit and Loss) are not taken into consideration.

(*b*) **Ascertainment of payable value of Liabilities and claims of the Preference Shareholders:** From the total value of the assets calculated as per the criteria discussed above, the liabilities (including the amount likely to be payable on account of contingent liabilities, if any) and the amount payable to preference shareholders are deducted to arrive at the net assets available for equity shareholders.

All current and non-current liabilities including the provision for tax and liabilities not provided for should be taken into consideration.

Claims of the preference shareholders include preference share capital, arrears of dividend on preference shares and dividend distribution tax thereon, if any, and share of participating preference shareholders in the surplus net assets after adjusting the amount payable to equity shareholders before equity shareholders claim in the surplus net assets.

Cum-dividend and ex-dividend prices : If ex-dividend price of an equity share is to be calculated, then dividend (proposed/payable) on equity shares and dividend distribution tax thereon, if any, are also deducted. If the object is to calculate cum-dividend price then proposed/payable equity dividend is not to be deducted. For example, if net assets available to equity shareholders before deduction of equity dividend is ₹ 22 lakhs and number of equity shares is one lakh of ₹ 10 each and dividend (proposed/payable) is 20%, then cum-dividend value per equity share would be ₹ 22 lakhs/one lakh = ₹ 22 and ex-dividend value per share would be ₹ 20 lakhs/one lakh = ₹ 20.

(*c*) **Determination of value of fully paid up and partly paid up equity shares:**

(*i*) If there are different types of equity shares **having different face values,** for example, shares of ₹ 10 each fully paid up and shares of ₹ 5 each fully paid up, and the intrinsic value of fully paid up share of ₹ 10 is ₹ 50, then the value of fully paid shares of ₹ 5 would be ₹ 50 × 5/10 = ₹ 25. In this case intrinsic value can be calculated on per rupee of face value basis.

(*ii*) If there are both fully paid up shares and partly paid up having the **same face value,** then a notional call equivalent to the uncalled amount is added with the net assets and thus partly paid up shares are made notionally fully paid up. Thereafter, the value of fully paid up share is calculated first and then the value of partly paid up shares is arrived at after deducting calls in arrears or uncalled amount as the case may be.

Merits of Net Assets Method

Following are the merits of net assets basis of valuation of shares :

(1) This method is very useful for valuation of shares of those companies which are being liquidated.

(2) This method takes into consideration both current and non-current assets, whether tangible or intangible, for valuation of shares.

(3) In this method, there is no difficulty in valuation of different classes of shares.

Demerits of Net Asset Method

Net assets method of valuation of shares suffers from the following limitations :

(1) It is difficult to estimate the net realisable value/current cost of all the assets.

(2) There is possibility that the estimates may be influenced by the personal bias of the valuer.

(3) It is not easy to calculate the value of goodwill.

(4) This method ignores the dividend policy and earnings of the company.

Suitability of Net Assets Method

Net assets method of valuation of shares is suitable in the following circumstances :

(1) When the company is about to be liquidated.

(2) When there is no reliable information regarding the future profitability of the company.

(3) When a company has been continuously incurring losses and there are no prospects of earning profits in future.

(4) When the statute requires the valuation of shares by this method. Statute generally prescribes stock exchange price for quoted shares and net assets based valuation for unquoted equity shares and average of net assets and yield methods in valuing shares of investment companies.

VALUATION OF SHARES ON YIELD OR EARNING BASIS

We have seen that net assets basis of valuation of shares is suitable for the companies which are going to be liquidated soon or those companies in respect of which reliable information about profit potential is not available. But in most of the cases an investor is interested in the rate of earnings or the rate of dividend. For a large block of shares, which can give the buyer a virtual control over the company, rate of earnings is appropriate; and for a small block of shares, the rate of dividend should be basis of valuation of shares.

The following methods are based on yield, or earnings :

(*a*) Dividend Yield Method or Dividend Capitalisation Method

(*b*) Earnings Capitalisation Method.

(*a*) Dividend Yield Method or Dividend Capitalisation Method

This method of valuation of shares is suitable for small block of shares. Under this method, expected rate of dividend is compared with the normal rate of dividend. If the expected rate of dividend is more than the normal rate, the value of the share would be proportionately higher than its paid up value. For example, if the expected rate of dividend is 20% and the normal rate is 10%, the value of the share will be double than that of its paid up value. Similarly, if the rate of dividend is less than the normal rate, the value of the share will be proportionately lower.

The formula for computing the dividend yield value of an equity share is :

$$\textbf{Dividend Yield Value of an Equity Share} = \frac{\textbf{Expected Dividend Rate}}{\textbf{Normal Rate of Return or Dividend}} \times \textbf{Paid up Value of the Share}$$

It can also be calculated as follows :

$$\textbf{Dividend Yield Value of an Equity Share} = \frac{\textbf{Expected Dividend in Rupees per Share}}{\textbf{Normal Rate of Return or Dividend}} \times 100$$

Expected rate of dividend depends on (*a*) past dividend rates and (*b*) maximum possible dividend. Maximum possible dividend is calculated as follows :

The following formula can be used for calculating maximum rate of dividend :

$$\text{Maximum rate dividend} = \frac{\text{Earnings for Equity Shareholders} - \text{Transfer to Reserves}}{\text{Paid up Equity Share Capital}} \times 100$$

Dividend yield method should be used for valuation of small block of shares. This can be used in the question if details of maximum possible dividend are available in the question.

Normal rate of return of a company can be calculated as follows :

Normal rate of return for the industry	XXX
In case of poor dividend track record	+ 0.5%
In case of good dividend track record	– 0.5%
In case of poor debt-equity ratio	+ 0.5%
In case of poor dividend coverage ratio	+ 0.5%
In case of poor asset backing	+ 0.5%
Normal rate of return for the company	XXX

The formulas for calculating debt-equity ratio, dividend coverage ratio and asset-backing ratio are as follows :

$$\text{Debt-Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Shareholders Funds}}$$

$$\text{Dividend Coverage Ratio} = \frac{\text{Profit after Tax - Preference Divided}}{\text{Equity Dividend}}$$

$$\text{Asset Backing Ratio} = \frac{\text{Intrinsic Value}}{\text{Paid up value of a share}}$$

Earnings or Future maintainable profits or earnings for equity shareholders can be calculated as follows:

	₹
Future maintainable profits (for the purpose of valuation of goodwill)	**XXX**
***Add* : Non-operating Income (net of tax)**	**XXX**
***Less* : Non-operating Expenses**	**XXX**
***Less* : Preference dividend and dividend distribution tax on pref. dividend**	**XXX**
Future maintainable profits for equity shareholders for valuation of shares purposes	**XXX**

In case of future maintainable profits for the purpose of valuation of goodwill only operating income is considered, but in case of dividend yield method total profit after tax should also include non-operating items of income and expense.

Merits of dividend yield method

Dividend yield method taken into consideration the dividend rate which is ignored in case of net asset method of valuation of shares.

Demerits of dividend yield method

(1) ***Too much importance to dividend factor:*** The main demerit of dividend yield method is that it gives too much weightage to the dividend factor. If a company earns huge amount of profit but declares dividend at a lower rate than the normal rate, the value of the share according to this method would be less than the paid up value which is not true in practice.

(2) ***Net assets ignored:*** The method does not taken into consideration the net assets of the company, although some adjustment may be made in the normal rate of return or dividend depending on the net asset backing. As stated earlier, the higher the asset backing per share the greater would be the confidence of the investors. Normally 1.5 to 2 times asset backing is considered satisfactory.

(3) ***Difficult to determine normal rate of return:*** The determination of expected rate of dividend and normal rate of return is not easy.

(4) ***Fluctuations in dividend rate:*** The share price may be manipulated by increasing or decreasing the rate of dividend.