## Paper-18: BUSINESS VALUATION MANAGEMENT

**Time Allowed: 3 Hours** **Full Marks: 100**

***The figures in the margin on the right side indicate full marks.***

**Answer Question No. 1 which is compulsory carrying 25 marks and any five from the rest.**

**Working Notes should form part of the answer.**

**"Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates."**

**1. (a) State whether the following statements are true or false: [1x10=10]**

**(i) Diversification is an important strategic alternative to growth.**
**(ii) Zero coupon bonds have no coupon rate, hence no yield.**
**(iii) Floating rate loans have interest payments that increase as market rates fall and fall as rates rise.**
**(iv) Under DCF method, in general, higher the risk level, higher will be the discount rate.**
**(v) Market value per share is expected to be lower than the book value per share in case of profitable and growing firms.**
**(vi) A lower discount would be applied to the cash flows of the government bond.**
**(vii) Variable dividend feature makes the computation of share value difficult.**
**(viii) A brand is nothing but a glorified product name, hence it has no value.**
**(ix) Intrinsic value and market price of equity shares are always equal.**
**(x) Possession of complimentary resources is one of the reasons for mergers negotiations.**

**(b) Fill in the blanks by using the words/phrases given in the brackets: [1x10=10]**

**(i) A theory that explains why the total value from the combinations resulted from a merger is greater than the sum of the values of the component companies operating independently is known as ---------- theory. (synergy/hubris/agency)**

**(ii) A ---------- is essentially a container for a customer's complete experience with the offer and the company. (goodwill/brand)**

**(iii) In a debt for equity swap, a firm replacing equity with debt ---------- its average ratio. (increases/decreases)**

**(iv) Estimated fair value of an asset is based on the …….. (current/discounted/future) operating cash flows.**

**(v) Key to income-based approach of valuation is ---------- ( capitalization rate / internal rate of return)**

**(vi) In case of Deep Discount Bonds, the issue price is always ---------- the face value (less than / more than)**

**(vii) The risk that the cash flows will not be delivered is called ---------- (liquidity risk/default risk)**

**(viii) Organizational capital is a ---------- component of intellectual capital (primary/secondary)**

**(ix) ---------- companies have volatile earnings and high-growth potential choose low-debt ratios. (telephones/software)**

**(x) ---------- measures the variation of distribution for the expected returns (standard division/regression).**

**(c) In each of the questions given below one out of the four options is correct. Indicate the correct answer: [1×5=5]**

**(i) If a bond is currently trading at a premium then-**
- **(a) Its current yield is more than its yield-to-maturity.**
- **(b) Its current yield is less than its yield-to-maturity.**
- **(c) Its current yield is equal to its yield-to-maturity future**
- **(d) Nothing can be concluded.**

**(ii) Which one of the following statements is not true about Efficient Markets?**
- **(a) Share price behave randomly and do not show any systematic pattern in the behavior.**
- **(b) Share prices fully reflect all available information.**
- **(c) Price of one share is independent of the price of other shares in the market.**
- **(d) None can earn abnormally high profiles on a constant basis.**

**(iii) Which is not a human-capital related intangible asset?**
- **(a) Trained workforce**
- **(b) Employment agreements**
- **(c) Union contracts**
- **(d) Design patents**

**(iv) Shareholders of target companies are typically paid in**
- **(a) Government bonds held by the target company**
- **(b) Government bonds held by the acquiring company**
- **(c) Cash and/or shares of the acquiring company**
- **(d) None of the above**

**(v) Indian Oil Corporation has ₹100 crores worth of common equity on its balance sheet and 50 lakhs shares of stock outstanding. The company's Market Value Added (MVA) is ₹24 crores. What is the company's stock price?**
- **(a) ₹ 230**
- **(b) ₹ 238**
- **(c) ₹ 248**
- **(d) ₹ 264**

**Answer**

**1. (a)** State whether the following statements are true or false:

(i) True

(ii) False

(iii) False

(iv) True

(v) False

(vi) True

(vii) True

(viii) False

(ix) False

(x) True

**1. (b)** Fill in the blanks by using words / phrases given in the brackets:

(i) Synergy

(ii) Brand

(iii) Increases

(iv) Discounted

(v) Capitalization rate

(vi) Less than

(vii) Default risk

(viii) Primary

(ix) Software

(x) Standard division

**1. (c)** In each of the questions given below one out of the four options is correct. Indicate the correct answer -

(i) (a) Its current yield is more than its yield-to-maturity.
(ii) (c) Price of one share is independent of the price of other shares in the market.
(iii) (d) Design patents
(iv) (c) Cash and/or shares of the acquiring company.
(v) (c) MVA = (Shares Outstanding)(Stock price) – Total common equity

₹24 crores = (50 lakhs)(stock price) - ₹100 crores.

₹124 crores = (50 lakhs)(stock price) = ₹248.

**2. (a) Strenous Limited is in the Pharmaceutical Industry and has a business strategy of growing inorganically. For this purpose, it is contemplating to acquire Placenta Limited which has a strong hold in cardiac segment. Strenous Limited has 30 crores shares outstanding**

**which is trading on an average price of 300 while Placenta Limited has outstanding shares 20 crores and are selling at an average price of 195 per share.The EPS are 12 and 6 for Strenous Limited and Placenta Limited respectively. Recently, the management of both the companies had a meeting wherein numbers of alternative proposals were considered for exchange of shares. They are**

**(i) Exchange ratio should be in proposition to the relative EPS of two companies.**

**(ii) Exchange ratio should be in proposition to the relative Prices of two companies.**

**(iii) Exchange ratio should be 3 shares of Strenous Limited for every 5 shares of Placenta Limited.**

**You are required to estimate EPS and Market Price assuming the P/E of Strenous Limited after merger will remain unchanged, under each of the three options.**

**(b) What is Slump Sale? Give examples. [(4x3) + 3]**

**Answer**

2. (a) The given information can be tabulated as under:

| | Strenous Limited | Placenta Limited |
|---|---|---|
| EPS (₹) | 12 | 6 |
| No of Outstanding Shares (in crores) | 30 | 20 |
| Net Profit ( in ₹ crores) | 360 | 120 |
| Net Profit ( in ₹ crores)after acquisition | 480 | - |
| Price of share | 300 | 195 |
| P/E Ratio | 25.00 | 32.50 |

| | Alternative-I | Alternative-II | Alternative-III |
|---|---|---|---|
| | Basis-EPS | Basis-Prices | Basis-3 shares for 5 shares |
| Exchange Ratio(Target company parameter/Acquiring company parameter) | 0.50 | 0.65 | 0.60 |
| New shares to be issued (in crores) Exchange ratio x shares of Placenta Limited. | 10 | 13 | 12 |
| Total No. of shares after acquisition ( in crores)=shares of Strenous Ltd. + shares issued to Placenta Ltd. | 40 | 43 | 42 |
| EPS of Strenous Limited=Combined EPS=Total Profits of merged entity/total shares of merged entity | 12.00 | 11.16 | 11.43 |
| | 300 | 279.07 | 285.71 |

(b) Slump sale means transfer of undertaking or unit or division or business activity as a whole for lump sum consideration without values being assigned to individual assets and liabilities. Profits or gains arising from slump sale shall be chargeable as long term capital gain.

Examples:

(i) Sterlite Industries and Sterlite Optical: Sterlite which was a diversified company with presence both in non-ferrous metal as well as Telecom cables decided to de-merger both the business into separate companies. The spin off was done in the ratio of 1:1.

(ii) Raymonds Ltd: Raymonds sold of Cement and Steel business to become one again, a purely fabric and garment company. The whole exercise fetched Raymonds ₹1140 crores. This enabled it to reduce high cost debts as well as buyback its own shares. Thus financially as well as in terms of shareholder value it was a correct step.

(iii) GE Shipping: The company has interests in shipping, property development,trading and finance. It was decided to de-merger property development business strategically with effect from 1st April,1999.

(iv) ABB and ABB Alstom Power India Ltd. : As a result of the global de-merger of ABB group and its hiring off power generation business with Alstom of France,ABB India was also de-merged in 1999. The objective was to remain in areas of power distribution and transmission services. The independent profitability of both the companies increased due to greater focus.

**3. (a) The following financial data pertaining to ZIZO LTD. an IT company are made available**

| **Year ended 31st March** | **2014** | **2013** | **2012** |
|---|---|---|---|
| **EBIT (₹)** | **696.03** | **325.65** | **155.86** |
| **Non-branded income (₹)** | **53.43** | **35.23** | **3.46** |
| **Inflation compound factor @ 8%** | **1.000** | **1.087** | **1.181** |
| **Remuneration of capital** | **5% of average capital employed** | | |
| **Average capital employed(₹)** | **1112.00** | | |
| **Corporate tax rate** | **35%** | | |
| **Capitalization factor** | **16%** | | |

**You are required to calculate the Brand Value for ZIZO Ltd.**

**(b) From the following information taken from the books of Aggressive Ltd. relating to staff and community benefits, prepare a statement showing value of benefits to staff and community at large, as required under Corporate Social Reporting.**

| | |
|---|---|
| **Environmental Improvements** | **₹20,10,000** |
| **Medical Facilities to staff and family** | **₹45,00,000** |
| **Training Programmes conducted in-house** | **₹10,25,000** |
| **Generation of Job Opportunities in the locality** | **₹60,75,000** |
| **Municipal Taxes paid** | **₹10,70,000** |
| **Increase in cost of living in the vicinity due to a thermal power station** | **₹16,55,000** |
| **Concessional transport, water supply to staff** | **₹11,25,000** |
| **Extra work put in by company staff and officers for drought relief** | **₹18,50,000** |
| **Leave encashment and leave travel benefits** | **₹52,00,000** |
| **Educational facilities for children of staff members** | **₹21,60,000** |
| **Subsidized canteen facilities on premises** | **₹14,40,000** |
| **Generation of business in the district** | **₹25,00,000** |

**[8+7]**

**Answer:**

**(3) (a)**

ZIZO LTD.

Computation of Brand Value

| Year ended 31st March | 2014 | 2013 | 2012 |
|---|---|---|---|
| EBIT (₹) | 696.03 | 325.65 | 155.86 |
| Less: Non-branded income (₹) | 53.43 | 35.23 | 3.46 |
| Adjusted Profits | 642.60 | 290.42 | 152.40 |
| Inflation compound factor @ 8% | 1.000 | 1.087 | 1.181 |
| Present value of profits for the brand | 642.60 | 315.69 | 179.98 |
| Weight age factor | 3 | 2 | 1 |
| Weight age profits | 1927.8 | 631.38 | 179.98 |
| Profits | 456.53 | | |
| Remuneration of capital (5% of average capital employed) | 55.60 | | |
| Brand related | 400.93 | | |
| Corporate tax @ 35% | 140.33 | | |
| Brand earning | 260.60 | | |
| Capitalization factor | 16% | | |

Brand Value= (Return/capitalization rate) = (260.60/0.16)= ₹1628.75.

(b)

**Aggressive Ltd.**
**Statement relating to staff and community benefits**

I. Social Benefits and Cost to Staff

| A. Social Benefits to Staff | ₹ |
|---|---|
| 1. Medical facilities | 45,00,000 |
| 2. Training programmes | 10,25,000 |
| 3. Concessional transport, water supply | 11,25,000 |
| 4. Leave encashment and leave travel benefits | 52,00,000 |
| 5. Educational facility for children of staff members | 21,60,000 |
| 6. Subsidised canteen facilities | 14,40,000 |
| Total | 1,54,50,000 |
| B. Social Cost to Staff | |
| Extra work put in by staff and officers for drought relief | 18,50,000 |
| Net Social Benefits to Staff (A–B) | 1,36,00,000 |

II. Social Benefits and Cost to Community

| A. Social Benefits to Community | ₹ |
|---|---|
| 1. Environmental improvements | 20,10,000 |
| 2. Generation of job opportunities | 60,75,000 |
| 3. Municipal taxes | 10,70,000 |
| 4. Generation of business | 25,00,000 |
| Total | 1,16,55,000 |
| B. Social Costs to Community | |
| Increases in cost of living in the vicinity due to a thermal power station | 16,55,000 |
| Net Social Benefits to Community (A – B) | 1,00,00,000 |

**4. (a) From the following details, compute the total value of human resources of skilled and unskilled group of employees according to Lev and Schwartz (1971) model.**

| Particulars | Skilled | Unskilled |
|---|---|---|
| Annual average earning of an employee till the retirement age | ₹60,000 | ₹40,000 |
| Age of retirement | 65 years | 62 years |
| Discount rate | 15% | 15% |
| No of employees in the group | 30 | 40 |
| Average age | 62 years | 60 years |

**(b) A company needs ₹5.1 crores to finance its investments for which ₹1.1 crore is available out of profits. The market price per share at the end of the current financial year is expected to be ₹100. If the discount rate is 10%, determine the present value of a share using the M-M Model. (Outstanding shares=10 lakhs) [7+8]**

**Answer**

**4. (a)**

| Particulars | Skilled | Unskilled |
|---|---|---|
| 1. Average Age | 62 years | 60 years |
| 2. Age of retirement | 65 years | 62 years |
| 3. Remaining period of employment | 3 years | 2 years |
| 4. Annual earnings/Employee | 60,000 | 40,000 |
| 5. Annuity factor at 15% for 3/2 years | 2.2832 | 1.6257 |
| 6. Value of employees= PV of Future Earnings of Employees = Annual Earnings x Annuity factor | | |
| (a) Skilled(60,000 x annuity factor at 15% for 3 years) | ₹1,36,992 | |
| (b) Unskilled(60,000 x annuity factor at 15% for 3 years) | | ₹65,028 |
| 7. No of employees | 30 | 40 |
| 8. Therefore total value of Human Resources | ₹41,09,760 | ₹26,01,120 |

Total value of Human Resources

| | |
|---|---|
| Skilled | ₹41,09,760 |
| Unskilled | ₹26,01,120 |
| Total | ₹67,10,880 |

(b)

Given that profits = E = ₹1.1 crore.
Company needs total = I= ₹5.1 crores.
The balance would be raised by issuing new shares (m) at price ($P_1$ of ₹100)
= 4,00,00,000 /100 = 4,00,000 shares
Original shares (n) = 10,00,000
Total no. of shares after issue (m+n)= 14,00,000 shares

k=10%

According to the MM Model

We have $nP_O = \frac{(m+n)P_1 + nD_1 - mP_1}{1+k}$

Now, $mP_1$ = Amount raised = Investment – [Earnings – Dividend distributed]

= I – [E – $nD_1$]

Substituting in the above equation, we have

$nP_O = \frac{(m+n)P_1 + E - I}{1+k}$ = 10,00,000 × $P_o$ = $\frac{1400000 \times 100 + 11000000 - 51000000}{1+0.10}$

Substituting we get $P_o$ = ₹90.90

**5. Write short notes on : [3×5=15]**

**(i) Credit Derivatives**

**(ii) Knowledge Companies**

**(iii) Currency Swap**

**Answer**

**5. (i) Credit Derivatives**

Credit derivative is vehicle of transferring credit risk. It is the contract between two financial market participants for transferring credit risk from one party to another party. Credit derivatives enable the transfer of credit risk from lender to someone else. It provides the lender the possibility to hedge against debtors default.

Credit derivatives also permit banks to transfer credit risk without the need to transfer assets physically. For example in a collateral loan obligation, a bank can sell a pool of corporate loans to a SPV in order to reduce its exposure to the corporate borrowers. Alternatively, it can transfer the credit risk exposure by buying credit protection for the same pool of corporate loans. In this case the transaction is referred to as synthetic collateralized loan obligation.

**(ii) Knowledge Companies**:

The term knowledge companies or knowledge intensive companies is increasingly being used to describe companies that focus or leverage their intellectual capital. Knowledge companies are utilizing their intellectual capital as a key source of competitive advantage. In a knowledge company, profits are generated primarily though the commercialization of new ideas and innovations, that is through the interaction of the company's human capital and structural capital that create intangibles always lead to a series of tangible outcomes, over a period of time. It is the interaction between tangible and intangibles that determine the corporate value. It is entrepreneurial activity that generates the primary value of so many business. The embedded 'know-how' or knowledge of an organization is dynamic, complex, heterogeneous and networked.

**(iii) Currency Swap:**

In a currency swap, the exchanges of cash flows between counterparties take place in two different currencies. Since two currencies are involved, currency swaps become different from interest rate swaps in its uses. First official record of currency swap

transaction was held in 1981 between IBM and World Bank. In currency swap, exchange of cash flows is in two different currencies on the basis of a predetermined formula of exchange rates. It is known as currency swap. More complex swaps involving two currencies are called cocktail swap.

Let us assume that an Indian firm needs fund for its US operation. The firm raises funds in Indian rupees and commits to serve the interest obligation and the final payment in Indian rupees. Fund raised in rupees converted in US dollar to acquire assets in the USA. The assets provide income in US dollar. The Indian firm is facing a risk, if rupee strengthens and dollar depreciates in the currency markets as it receives lesser rupee amount for the fixed return in US dollar.

Similarly an US firm which needs to acquire assets in India raises dollar funds in USA faces some risk. Its earnings would be in Indian rupees and liabilities need to be serviced in US dollar. Like the Indian firm, the US firm also faces risk in shortfall in US dollar, if dollar appreciates or rupee depreciates.

**6. Sundar Manufacturing Company Limited's Operating Profits and Operating Capital Employed during last five years are – (₹ in Lakhs)**

| Particulars | Operating Profit | Opening Capital | Closing Capital |
|---|---|---|---|
| 2008 - 2009 | 410 | 4,000 | 6,000 |
| 2009-2010 | 690 | 6,000 | 7,000 |
| 2010-2011 | 800 | 7,000 | 9,000 |
| 2011-2012 | 1500 | 9,000 | 10,000 |
| 2012-2013 | 1800 | 10,000 | 12,000 |

**The Company is expected to commission a new project in April 2013 at a cost of ₹ 9,000 Lakhs, which would generate operational flow amounting to ₹ 1,200 Lakhs p.a. for atleast 4 years. Moreover the Company expects a 2% annual growth of existing profits over the next 4 years. Industry Average Rate of Return is 6% p.a.**

**Determine the Company's Goodwill taking 4 years purchase of Discounted Super Profit. The Company is in 25% tax bracket. Consider 5% Capital Growth and 10% WDV depreciation from April 2013 onwards. 60% of Capital Employed comprise of depreciable Fixed Assets. Use 10% Discount Factor.**

**Also assume that the Company has the following Capital Structure as on 31.03.2013 - (a) Equity Share Capital (₹ 10 each) = ₹ 5,000 Lakhs, (b) Reserves and Surplus = ₹ 4,000 Lakhs, (c) 14% Debentures = ₹ 3,000 Lakhs.**

**The funds for the new project (₹ 9,000 Lakhs) are to be raised by issue of shares and availing loans. The Company wants to maintain the existing Debt-Equity Ratio. It can arrange for 16% Term Loan.**

**How much maximum premium should the Company fix for its new Equity Issue? Assume that the Company desires to link Premium to the Intrinsic Value of Shares after taking into account the Value of Goodwill. [15]**

**Answer:**

6. (i) Computation of Depreciation (₹ Lakhs)

| Year | Opening Balance | New Project | Additions at 5% of Opg Bal. | Gross Balance | Fixed Assets at 60% | Depreciation at 10% | Closing Balance |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5=2+3+4 | 6 | 7 = 6 x 10% | 8 = 5-7 |
| 2013-14 | 12,000 | 9,000 | 600 | 21,600 | 12,960 | 1,296 | 20,304 |
| 2014-15 | 20,304 | - | 1,015 | 21,319 | 12,792 | 1,279 | 20,040 |
| 2015-16 | 20,040 | - | 1,002 | 21,042 | 12,625 | 1,262 | 19,780 |
| 2016-17 | 19,780 | - | 989 | 20,769 | 12,461 | 1,246 | 19,523 |

Notes:

- Since Capital Growth is 5%, additions are made at 5% of the Opening Balance, for every year. Alternatively, for Year 2013-2014, 5% growth can be computed on Opening Capital Plus New Project Cost, since New Project cost is incurred in the year beginning itself.
- Depreciation is provided at 10% on the Closing Balance in Fixed Assets for a particular year.

(ii) Computation of Future Maintainable Profits (₹ Lakhs)

| Year | Operating Income | | | Depreciation (WN 1) | Taxable Income | Tax at 25% | Maintainable Profit |
|---|---|---|---|---|---|---|---|
| | Existing | Additional | Total | | | | |
| 1 | 2 | 3 | 4=2+3 | 5 | 6 = 4-5 | 7=6x25% | 8 = 6-7 |
| 2013-14 | (1,800+2%)=1,836 | 1,200 | 3,036 | 1,296 | 1,740 | 435 | 1,305 |
| 2014-15 | (1,836+2%)=1,873 | 1,200 | 3,073 | 1,279 | 1,794 | 449 | 1,345 |
| 2015-16 | (1,873+2%)=1,910 | 1,200 | 3,110 | 1,262 | 1,848 | 462 | 1,386 |
| 2016-17 | (1,910+2%)=1,948 | 1,200 | 3,148 | 1,246 | 1,902 | 476 | 1,426 |

Note:

It is assumed that the Operating Profits given is excluding Interest on Loans Borrowed.

(iii) Computation of Future Average Capital Employed (₹ Lakhs)

| Year | Opening Capital Employed | Closing Capital Employed | Average Capital Employed | Normal Rate of Return at 6% |
|---|---|---|---|---|
| 2013-14 | 12,000 + 9000 = 21,000 | 20,304 | 20,652 | 1,239 |
| 2014-15 | 20,304 | 20,040 | 20,172 | 1,210 |
| 2015-16 | 20,040 | 19,780 | 19,910 | 1,195 |
| 2016-17 | 19,780 | 19,523 | 19,651 | 1,179 |

Note:

Since new project investment is made in the beginning of the year itself, it is considered as part of Opening Capital Employed for computing Average Capital Employed.

(iv) Computation of Discounted Super Profits and Goodwill (₹ Lakhs)

| Year | Maintainable Profits | Normal Profit | Super Profit | PV Factor | Disc. Super Profit |
|---|---|---|---|---|---|
| 2013-14 | 1,305 | 1,239 | 66 | 0.9091 | 60.00 |
| 2014-15 | 1,345 | 1,210 | 135 | 0.8264 | 111.56 |
| 2015-16 | 1,386 | 1,195 | 191 | 0.7513 | 143.50 |
| 2016-17 | 1,426 | 1,179 | 247 | 0.6830 | 168.70 |
| Total = Discounted Super Profits for 4 Years = Goodwill | | | | | 483.76 |

(v) Funding Pattern for the new Project (₹ Lakhs)

| | |
|---|---|
| (a) Present Debt Equity Ratio: $\frac{\text{Debt}}{\text{Equity}} = \frac{₹3,000}{(₹5,000 + ₹4,000)}$ | 0.33 or 1:3 |
| (b) Amount required for the Project | ₹9,000 Lakhs |
| (c) Amount to be raised by way of Debt of 16% Term Loan = ₹9,000 Lakhs x1/4 | ₹2,250 Lakhs |
| (d) Amount to be raised by way of Equity Issue = ₹ 9,000 Lakhs x 3/4 | ₹6,750 Lakhs |

(vi) Computation of Intrinsic Value of Share and Share Premium

| Particulars | ₹ Lakhs |
|---|---|
| Equity Share Capital | 5,000.00 |
| Reserves | 4,000.00 |
| Add: Goodwill | 483.76 |
| Net Worth of Equity Holders | 9,483.76 |
| Number of Equity Shares (Lakhs) | 500 |
| Intrinsic Value Per Share $\frac{₹9,483.76 \text{ Lakhs}}{500 \text{ Lakhs}}$ i.e. Issue Price of New Equity | ₹ 18.97 |
| Less: Face Value of each Equity Share | ₹ 10.00 |
| Premium on Fresh Issue | ₹8.97 |

**7. Timby Ltd is in the business of making Sports Equipment. The Company operates from Thailand. To globalize its operations Timby has identified Fine Toys Ltd, an Indian Company, as a potential takeover candidate. After due diligence of Fine Toys Ltd, the following information is available –**

**(a) Cash Flow Forecasts (₹ in Crores)**

| **Year** | **10** | **9** | **8** | **7** | **6** | **5** | **4** | **3** | **2** | **1** |
|---|---|---|---|---|---|---|---|---|---|---|
| **Fine Toys Ltd** | **24** | **21** | **15** | **16** | **15** | **12** | **10** | **8** | **6** | **3** |
| **Timby Ltd** | **108** | **70** | **55** | **60** | **52** | **44** | **32** | **30** | **20** | **16** |

**(b) The Net Worth of Fine Toys Ltd (in Lakh ₹) after considering certain adjustments suggested by the due diligence team reads as under-**

| | | |
|---|---|---|
| **Tangible** | **750** | |
| **Inventories** | **145** | |
| **Receivables** | **75** | **970** |
| **Less: Creditors** | **165** | |
| **Bank Loans** | **250** | **(415)** |
| **Represented by Equity Shares of ₹ 1,000 each** | | **555** |

**Talks for the takeover have crystallized on the following -**

1. **Timby Ltd will not be able to use Machinery worth ₹ 75 Lakhs which will be disposed off by them subsequent to takeover. The expected realization will be ₹ 50 Lakhs.**
2. **The Inventories and Receivables are agreed for takeover at values of ₹ 100 and ₹ 50 Lakhs respectively, which is the price they will realize on disposal.**

3. **The liabilities of Fine Toys Ltd will be discharged in full on take over alongwith an employee settlement of ₹ 90 Lakhs for the employees who are not interested in continuing under the new management.**
4. **Timby Ltd will invest a sum of ₹ 150 Lakhs for upgrading the Plant of Fine Toys Ltd on takeover. A further sum of ₹ 50 Lakhs will also be incurred in the second year to revamp the machine shop floor of Fine Toys Ltd.**
5. **The anticipated Cash Flows (in ₹ Crore) post takeover are as follows –**

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cash Flows | 18 | 24 | 36 | 44 | 60 | 80 | 96 | 100 | 140 | 200 |

**You are required to advise the management the maximum price which they can pay per share of Fine Toys Ltd. if a discount factor of 20% is considered appropriate. [15]**

**Answer:**

7. 1. Computation of Operational Synergy expected to arise out of merger (₹ lakhs):

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Cash Flow after merger | 1,800 | 2,400 | 3,600 | 4,400 | 6,000 | 8,000 | 9,600 | 10,000 | 14,000 | 20,000 |
| Cash Flow without merger | 1,600 | 2,000 | 3,000 | 3,200 | 4,400 | 5,200 | 6,000 | 5,500 | 7,000 | 10,800 |
| Synergy Effect | 200 | 400 | 600 | 1,200 | 1,600 | 2,800 | 3,600 | 4,500 | 7,000 | 9,200 |

2. Valuation of Fine Toys Ltd (₹ Lakhs):

| Year | Discount Factor | Without considering merger | | Considering Merger | |
|---|---|---|---|---|---|
| | | Cash Flows | Discounted Cash Flow | Cash Flows | Discounted Cash Flow |
| 1 | 0.8333 | 300 | 250.00 | 200 | 166.66 |
| 2 | 0.6944 | 600 | 416.64 | 400 | 277.76 |
| 3 | 0.5787 | 800 | 462.96 | 600 | 347.22 |
| 4 | 0.4823 | 1000 | 482.30 | 1200 | 578.76 |
| 5 | 0.4019 | 1200 | 482.28 | 1600 | 643.04 |
| 6 | 0.3349 | 1500 | 502.35 | 2800 | 937.72 |
| 7 | 0.2791 | 1600 | 446.56 | 3600 | 1004.76 |
| 8 | 0.2326 | 1500 | 348.90 | 4500 | 1046.70 |
| 9 | 0.1938 | 2100 | 406.98 | 7000 | 1356.60 |
| 10 | 0.1615 | 2400 | 387.60 | 9200 | 1485.80 |
| | | | 4,186.57 | | 7,845.02 |

Difference in Valuation had there been no merger = 7,845.02 - 4,186.57 = ₹ 3,658.45 Lakhs

3. Computation of Maximum Value to be quoted (₹ Lakhs)

| Particulars | Amount | Amount |
|---|---|---|

| | | |
|---|---|---|
| Value as per discounted Cash Flow from Operations | | 7,845 |
| Add: Cash to be collected immediately by disposal of assets: | | |
| Sundry Fixed Assets | 50 | |
| Inventories and receivables | 150 | 200 |
| Less: Sundry Creditors | 165 | |
| Retrenchment Compensation | 90 | |
| Bank Loan | 250 | |
| Investment to be made on takeover | 150 | |
| Present value of investment at the end of year 2 (₹ 50 lakhs x 0.6944) | 34.7 | (689.70) |
| Maximum Amount to be quoted | | 7,355.30 |

**8. (a) Why do many mergers fail? [5]**
**(b) Why do Companies want to measure intellectual capital? [5]**
**(c) Discuss Synergy with reference to merger. [5]**

**Answer**

8. (a) Major reasons of failure of Mergers are as follows :
- Flawed corporate strategy for either or both companies.
- One company sugarcoats the truth, the other buys a Power Point pitch.
- Sub-optimum integration strategy for the situation.
- Cultural misfit, loss of key employees after retention agreements are up.
- Acquiring company's management team inexperienced at M&A.
- Flawed assumptions in synergies calculation.
- Ineffective corporate governance, plain and simple.
- Two desperate companies merge to form one big desperate company.
- An impulse buy or panic sell gets shoved down the board's throat.

(b) There a number of reasons why firms want to measure IC and the predominant reason has been for strategic or internal management purposes. Specifically, the reasons include:
(i) Alignment of IC resources with strategic vision. To support the implementation of a specific strategy via a general upgrading of the work with the companies' human resources (support and maintain as trategy concerning the composition of staff as regards seniority, professional qualifications and age. Through the description of the staff profile, measuring, discussion and adjustment become possible).
(ii) To support or maintain various parties' awareness of the company.
(iii) To help bridge the present and the past (stimulates the decentralized development of the need for constant development and attention towards change).
(iv) To influence stock prices, by making several competencies visible to current and potential customers.
(v) To make the company appear to the employees as a name providing an identity for the employees and visualizing the company in the public. Knowledge of employees and customers will stimulate the development of a set of policies to increase customer satisfaction and customer loyalty.
(vi) Assessing effectiveness of a firm's IC utilization - Allocate resources between various business units. Extract full value from acquisition and joint ventures.
(vii) Determine the most effective management incentive structures.

(c) Synergy results from complementary activities. For example, one firm may have a substantial amount of financial resources while the other has profitable investment opportunities. Likewise, one firm may have a strong research and development team whereas the other may have a very efficiently organized production department. Similarly, one firm may have well established brands of its products but lacks marketing organization and another firm may have a very strong marketing organization. The merged business unit in all these cases will be more efficient than the individual firms. And, hence, the combined value of the merged firms is likely to be greater than the sum of the individual entities (units). Symbolically;

Combined value = Stand alone value of acquiring firm, Va + Stand alone value of acquired target firm, Vt + Value of synergy, $\Delta Vat$

Normally, the value of synergy is positive and this constitutes the rationale for the merger. In valuing synergy, costs attached with acquisitions should also be taken into account. These costs primarily consist of costs of integration and payment made for the acquisition of the target firm, in excess of its value, Vt. Therefore, the net gain from the merger is equal to the difference between the value of synergy and costs.

Net gain = Value of synergy, $\Delta V_{at}$ – costs.