

Answer to MTP_Final_Syllabus 2008_Dec'2014_Set 1

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) Point estimation of the value of a business is the right way to determine its value.
- (ii) Higher debt/Equity ratio implies higher valuation of a company.
- (iii) The key importance of annual reports information is that it is used by investors when they form their expectation about the firm's future earnings and dividends and riskiness of those of cash flow.
- (iv) Management buy out is not a takeover method.
- (v) Paying a one-time extraordinary dividend is a defensive financial technique.
- (vi) The corporate valuation model cannot be used for a company that doesn't pay dividends.
- (vii) Free cash flow should be discounted at the weighted average cost of capital to find the value of a company's operations.
- (viii) An ESOP can be used to improve workers' productivity and to prevent hostile takeovers.
- (ix) In a synergistic merger, the post-merger value exceeds the sum of the separate companies' pre-merger values.
- (x) Since the basic rationale for any operating merger is synergy, in planning such mergers, the development of accurate pro forma cash flows is the single most important aspect of the analysis.

(b) Fill in the blanks by using the words/phrases given in the brackets: [1x5=5]

- (i) The value of the patent does not show up if it is _____ generated. (internally/externally).
- (ii) The risk that the cash flows will not be delivered is called _____ (liquidity risk/default risk).

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- (iii) Normal yield curves indicate that short term borrowing costs are _____ long term borrowing costs (above/below).
- (iv) Organizational capital is a _____ component of intellectual capital (primary/ secondary).
- (v) _____ method of valuation is used. (direct capitalization/yield capitalization).
- (c) In each of the questions given below one out of the four options is correct. Indicate the correct answer: [2×5=10]
- (i) RIL (FV ₹10) quotes ₹520 on NSE, and 3 months future price quoting at NSE is ₹542, and one month borrowing rate is given as 15%.The price of 3-month RIL futures is
(a) 539.50
(b) 598
(c) 578.50
(d) 545
- (ii) S & Co. earns ₹12 per share, capitalization rate of 10% and has a return on investment at the rate of 20%. According to Walter's model price per share at 30% dividend payout ratio will be
(a) ₹212
(b) ₹204
(c) ₹220
(d) ₹224
- (iii) A bank borrowed call money for 3 days in the overnight call money market and paid ₹152345 for these 3 days on a borrowing of ₹40 crores. The implied call money rate will be
(a) 4.61%
(b) 4.63%
(c) 4.65%
(d) 4.67%
- (iv) A convertible bond with a face value of ₹1,000 issued at ₹1,300 with a coupon rate of 12%.The conversion rate is 20 shares per bond. The current market price of the bond is ₹1,500 and that of stock is ₹60.The conversion value premium is
(a) 15%
(b) 18%
(c) 20%
(d) 25%
- (v) A wishes to sell his business and his business has been good. Revenues are growing each year. He desires to pick a best offer and have patience till he gets best price. In this situation on which basis he should value his business
(a) Book Value
(b) NPV of future earnings
(c) Auction value
(d) Fair Market Value

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Answer

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

- (i) False
- (ii) False
- (iii) True
- (iv) False
- (v) True
- (vi) False
- (vii) True
- (viii) True
- (ix) True
- (x) True

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

- (i) Internally
- (ii) Default risk
- (iii) Below
- (iv) Primary
- (v) Yield capitalization

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

(i) ₹539.50

Hints: Future's Price = Spot + Cost of Carry – Dividend

$$F = 520 + 520 \times 0.15 \times 0.25 - 0 = 539.50$$

(ii) ₹204

Hints: As per Walter Model $P = \frac{\left(D + \frac{r}{k}(E - D)\right)}{k} = \frac{\left(3.60 + \frac{0.20}{0.10}(12 - 3.60)\right)}{0.10} = 204$

(iii) 4.63%

Hints: Interest for 3 days = 40 Crores $\times \frac{3}{365} \times \frac{r}{100} = ₹1,52,345$

$$r = 4.63\%$$

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(iv) 25%

Hints: Conversion rate is 20 shares per bond. Market price of share ₹ 60.
 Conversion Value 20 x ₹ 60 = ₹ 1,200.
 Market price of bond = ₹ 1,500

$$\text{Premium over Conversion Value } (\text{₹}1,500 - \text{₹}1,200) = \frac{300}{1,200} \times 100 = 25\%$$

(v) Fair Market Value

2. The following abridged Balance Sheet as at 31.03.2014 pertains to Jupiter Ltd.

	(₹Lakhs)
Equity & Liabilities	₹
(1) Shareholders' Funds:	
(a) Share Capital - Equity Share Capital	
(i) 180 Lakhs Shares of ₹10, fully paid up	1,800
(ii) 90 Lakhs Shares of ₹10, ₹8 paid up	720
(iii) 150 Lakhs Shares of ₹5, fully paid up	750
(b) Reserves & Surplus	5,628
(2) Non-Current Liabilities:	
Long Term Borrowings - Secured Loans	4,500
(3) Current Liabilities:	
(a) Other Current Liabilities	1,242
(b) Short Term Provisions	960
Total	15,600
Assets	
(1) Non-Current Assets:	
(a) Fixed Assets:	
(i) Tangible Assets	11,166
(ii) Intangible Assets - Goodwill	420
(b) Other Non-Current Assets	
- Miscellaneous Expenditure	171
(2) Current Assets:	
(a) Short Term Loans & Advances	943
(b) Other Current Assets	2,900
Total	15,600

You are required to calculate the following for each one of three categories of Equity Shares appearing in the above mentioned Balance Sheet -

- Intrinsic Value on the basis of Book Values of Assets and Liabilities including Goodwill,
- Value per Share on the basis of Dividend Yield. Normal Rate of Dividend in the concerned Industry is 15%, whereas Jupiter Ltd has been paying 20% Dividend for the last four years and is expected to maintain it in the next few years, and

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- Value per Share on the basis of EPS, For the year ended 31st March, 2014 the Company has earned ₹1,371 Lakhs as Profit after tax, which can be considered to be normal for the Company. Average EPS for a fully paid Share of ₹10 of a Company in the same Industry is ₹2. [7+3+5]

Answer to 2:

A. Computation of Capital employed

(₹ in Lakhs)

Particulars	Amount	Amount
Goodwill at Cost		420
Other fixed assets		11,166
Current Assets		2,900
Total assets Less: Outside liabilities		15,429
Secured loans	4,500	
Current liabilities	1,242	
Capital employed attributable to Equity Share Holders		8,727

B. Computation of Value per Share under Intrinsic Value Method

(₹ in Lakhs)

Particulars	Amount
Capital employed as on valuation Date i.e. Balance Sheet Date	8,727
Add: Notional call on shares partly paid up (90 Lakhs shares × ₹ 2 per share)	180
Net assets available to equity shareholders [A]	8,907
Equivalent value of equity share capital (at par value)	
180 + 90 Lakhs Shares of ₹ 10	2,700
150 Lakhs Shares of ₹ 5	750
Face value of equity share capital [B]	3,450
Value per share of ₹1 = $\frac{A}{B} = \frac{₹8,907}{₹3,450}$	₹2.58
Value per Share	
₹ 10 Share, fully paid-up = ₹ 10 × ₹ 2.58	₹ 25.80
₹ 10 Share, × 8 paid-up = ₹ 25.80 Less ₹ 2 Unpaid	₹ 23.80
₹ 5 Share, fully paid-up = ₹ 5 × ₹ 2.58	₹ 12.90

Note: Unpaid amount on partly paid up shares is assumed to be called up in the immediate future.

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C. Computation of Value per Share under Dividend Yield Method

(₹ in lakhs)

Particulars	Amount
Company's Dividend	20%
Normal industry	15%
Value per share	
₹ 10 Shares, fully paid up = $\frac{₹10 \times 20\%}{15\%}$	₹ 13.33
₹ 10 Shares, ₹ 8 paid up = $\frac{₹8 \times 20\%}{15\%}$	₹ 10.67
₹ 5 Shares, Fully paid up = $\frac{₹5 \times 20\%}{15\%}$	₹6.67

Note: Dividend is payable only on the paid up value. Hence under dividend - yield Method, the value per share for different Categories of shares, should be taken on pro-rata basis, as indicated above.

D. Computation of Value per Share on the basis of EPS

(₹ in lakhs)

Particulars	Amount
Profit after Tax for the year	1,371
Paid up Equity share capital [1,800+720+750]	15%
Company's EPS for a share of ₹1 = $\frac{₹1,371}{₹3,270}$	0.42
Value per share = $\frac{\text{Face Value} \times \text{Company EPS per ₹1}}{\text{Market EPS}}$	
₹ 10 Shares, fully paid up = $\frac{₹10 \times 0.42}{0.20}$	₹ 21.00
₹ 10 Shares, ₹ 8 paid up = $\frac{₹8 \times 0.42}{0.20}$	₹ 16.80
₹ 5 Shares, fully paid up = $\frac{₹5 \times 0.42}{0.20}$	₹10.50

E. Summary of value per under different methods

Particulars	Intrinsic value method	Dividend yield method	EPS method
₹ 10 Shares, fully paid up	₹25.80	₹13.33	₹21.00
₹ 10 Shares, ₹ 8 paid up	₹23.80	₹10.67	₹16.80
₹ 5 Shares, fully paid up	₹12.90	₹6.67	₹10.50

Note: Under Intrinsic Value / Net Assets Method, the difference between fully and partly paid up share will reflect the uncalled amount. However, under Dividend and EPS methods, the difference between the fully and partly paid up shares will be proportional to the paid up value.

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3. (a). The following information is provided related to the acquiring Firm Black Ltd. and the target Firm White Ltd.

Particulars	Black Ltd.	White Ltd.
Earnings after tax (₹)	4000 lakhs	800 lakhs
Number of shares outstanding	400 lakhs	200 lakhs
P/E ratio (times)	20	10

Required:

- (i) What is the swap Ratio based on current market prices?
- (ii) What is the EPS of Black Ltd. after acquisition?
- (iii) What is the expected market price per share of Black Ltd after acquisition assuming P/E ratio of Black Ltd. remains unchanged?
- (iv) Determine the market value of the merged firm.
- (v) Calculate gain/loss for shareholders of the two independent companies after acquisition. [3+2+1+1+3]

- (b) A company has a total investment of ₹10,00,000 in assets and 1,00,000 outstanding ordinary shares at ₹10 per share (par value). It earns a rate of 15 per cent on its investment and has a policy of retaining 50 per cent of the earnings. If the appropriate discount rate of the firm is 10 per cent, determine the price of its share using Gordon's model. What shall happen to the price of the share if the company has a payout of 80 per cent or 20 per cent? [5]

Answer to 3 (a):

Particulars	Black Ltd.	White Ltd.
EPS	$\frac{₹4000 \text{ lakhs}}{400 \text{ lakhs}} = ₹10$	$\frac{₹800 \text{ lakhs}}{200 \text{ lakhs}} = ₹4$
Market Price [MPS = EPS x P/E ratio]	$₹10 \times 20 = ₹200$	$₹4 \times 10 = ₹40$

- (i) The swap ratio based on current market price is = $\frac{₹40}{₹200} = 0.20$ or 1 share of Black Ltd. for 5 shares of white Ltd.
No. of shares to be issued = 200 lakhs x 0.20 = 40 lakhs

- (ii) EPS after merger = $\frac{₹(4000\text{lakhs} + 800\text{lakhs})}{400\text{lakhs} + 40\text{lakhs}} = ₹10.91$.

- (iii) Expected market price after merger assuming P/E ratio = 20 times
= ₹10.91 x 20
= ₹218.20

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- (iv) Market value of merged firm = ₹218.20 x 440 lakhs
 = ₹96008 lakhs
 = ₹960.08 crores.

(v) Total Gains after acquisition

Particulars	₹ in crores	₹ in crores.
Post merger market value of the merged firm		960.08
Less: Pre-merger market value		
Black Ltd. [400 lakhs x ₹200]	800	
White Ltd. [200 lakhs x ₹40]	80	(880)
		80.08

Appropriation of gains from the merge among shareholders:

Particulars	Shareholders of Black Ltd.	Shareholders of White Ltd.
Post merger value	872.80	87.28
Less: Pre merger value	(800.00)	(80.00)
Gain to shareholders	72.80	7.28

Answer to 3 (b):

Gordon's share valuation Model is $P_o = \frac{E(1-b)}{K_e - br} = \frac{(1-b)r \times A}{K_e - br}$

Where, A represents investment per share, which is ₹10 in this case

- (i) At a payout of 50%, the price of the share is $P_o = \frac{(1-0.50)0.15 \times 10}{0.10 - (0.15 \times 0.5)} = ₹30$
- (ii) At a payout of 80% $P_o = \frac{(1-0.20)0.15 \times 10}{0.10 - (0.15 \times 0.20)} = ₹17$
- (iii) At a payout of 20% $P_o = \frac{(1-0.80)0.15 \times 10}{0.10 - (0.15 \times 0.80)} = (-) ₹15.$

4. (a) Following information are available in respect of ABC Ltd. which is expected to grow at a higher rate for 4 years after which growth rate will stabilize at a lower level:

Base year information:

Particulars	₹in lakhs
Revenue	20,000
EBIT	3,000
Capital Expenditure	2,800
Depreciation	2,000

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Information for high growth and stable growth period are as follows:

Particulars	High Growth	Stable Growth
Growth in Revenue & EBIT	20%	10%
Growth in capital expenditure and depreciation	20%	Capital expenditure are offset by depreciation
Risk free rate	10%	9%
Equity beta	1.15	1
Market risk premium	6%	5%
Pre tax cost of debt	13%	12.86%
Debt equity ratio	1:1	2:3

For all time, working capital is 30% of revenue and corporate tax rate is 35%.

What is the value of the firm?

[11]

(b) Describe the progress made by India so far in the field of human resource accounting. [4]

Answer to 4 (a):

High growth phase

$$K_e = 0.10 + 1.15 \times 0.06 = 0.169 \text{ or } 16.9\%$$

$$K_d = 0.13 \times (1 - 0.35) = 0.0845 \text{ or } 8.45\%$$

$$WACC = 0.50 \times 0.169 + 0.50 \times 0.0845 = 0.12675 \text{ or } 12.68\%$$

Stable growth phase

$$K_e = 0.09 + 1 \times 0.05 = 0.14 \text{ or } 14\%$$

$$K_d = 0.1286 \times (1 - 0.35) = 0.08359 \text{ or } 8.36\%$$

$$WACC = 0.60 \times 0.14 + 0.40 \times 0.08359 = 0.117436 \text{ or } 11.74\%$$

Determination of forecasted Free Cash Flow of the Firm (FCFF)

Particulars	Year 1	Year 2	Year 3	Year 4	Terminal Year
Revenue	24,000	28,800	34,560	41,472	45,619.2
EBIT	3,600	4,320	5,184	6,220.8	6,842.88
EAT = EBIT (1 - t)	2,340	2,808	3,369.6	4,043.52	4,447.87
Add: Depreciation	2,400	2,880	3,456	4,147.20	---
Less: Capital Expenditure	(3,360)	(4,032)	(4,838.4)	(5,806.08)	---
Less: Change in working capital	(1,200)	(1,440)	(1,728)	(2,073.60)	(1,244.16)
Free Cash Flow (FCF)	180.00	216.00	259.20	311.04	3,203.71

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Present value of FCF during the explicit forecast period is:

FCF (₹ in lakhs)	PVF @ 12.68%	PV (₹ in lakhs)
180.00	0.8875	159.75
216.00	0.7876	170.12
259.20	0.6989	181.15
311.04	0.6203	192.94
		703.96

PV of terminal value is $\frac{₹ 3,203.71}{(0.1174 - 0.10)} \times \frac{1}{(1.1268)^4} = (184121.26 \times 0.6203) = 114210.42$ lakhs.

Therefore, the value of the firm is ₹ (703.96 + 1,14,210.42) lakhs = ₹1,14,914.38 lakhs

Answer to 4 (b):

Progress made by India so far in the field of human resource accounting:

Human resource accounting can be defined as the process of indentifying, measuring and communicating information about human resources in financial statements in order to facilitate effective management. Human resource accounting is a recent phenomenon in India. Leading public sector units like OIL, BHEL, NTPC, MMTC and SAIL etc. have started reporting Human Resources in their annual reports as additional information. The Indian companies basically adopted the model of human resource valuation as advocated by Lev and Schwartz (1971). Indian Companies focused their attention on the present value of employee earning as a measure of their human capital. However the Indian Companies have suitably modified the Lev and Schwartz model to suit their individual circumstances.

5. (a) Supreme Ltd. is comprised of only four major investment projects, details of which are as follows:

Project	% of market value	Annual % return during last 5 years	Risk % of standard deviation	Correlation with the market
A	30	10	15	0.55
B	15	18	20	0.75
C	29	15	14	0.84
D	26	13	18	0.62

The risk free rate is expected to be 6% per year, the market return is 15% per year and the standard deviation of market returns is 14%.

Assume that Supreme Ltd's shares are currently priced based upon the assumption that the last five years experience of returns will continue for the foreseeable future.

Evaluation whether or not the share price of Supreme Ltd. is undervalued/overvalued.

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(b) Black Ltd., a lessee, acquired a machinery on lease from White Ltd., (lessor) on January 1, 2013. The lease term covers the entire economic life of the machinery, i.e., 3 years. The F.V. of the machinery on January 1, 2013 is ₹10.50 lakhs. The lease agreement requires the lessee to pay an amount of ₹4.50 lakhs p.a. beginning December 31, 2013. The lessee has guaranteed an RV of ₹34,200 on December 31, 2015 to the lessor. The lessor however estimates that the machinery will have a salvage value of only ₹30,000 on December 31, 2015. The implicit rate of interest is 15%, compute the value of machinery, to be recognized by the lessee, and also the finance charges, every year, on the basis of AS – 19. [4+4]

Answer to 5 (a):

Project	Beta factor	% of company value
A	$15 \times \frac{0.55}{14} = 0.589$	30%
B	$20 \times \frac{0.75}{14} = 1.071$	15%
C	$14 \times \frac{0.84}{14} = 0.84$	29%
D	$18 \times \frac{0.62}{14} = 0.797$	26%

Over all Beta = $0.589 \times 30\% + 1.071 \times 15\% + 0.84 \times 29\% + 0.797 \times 26\%$
 = 0.788

Assuming the company has no debt, and using the CAPM.

Required Return = $6\% + 0.788 (15\% - 6\%)$
 = 13.092%

The historical return over the last 5 years has been
 = $10\% \times 30\% + 18\% \times 15\% + 15\% \times 29\% + 13\% \times 26\%$
 = 13.43%

The actual return is higher than the required return. Hence, shares are undervalued.

Answer to 5 (b):

Here, Fair value ₹10.50 lakhs PV of minimum lease payment from the point of lessee:

Year	MLP (₹)	Discount Factor @ 15%	PV of MLP
1	4,50,000	0.8696	3,91,320
2	4,50,000	0.7561	3,40,245
3	4,50,000	0.6575	2,95,875
3	34,200	0.6575	22,487
			10,49,927

Rounded off ₹10,50,000

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Since fair value and PV of MLP is same the asset / liability will be recognized on inception of lease at ₹10,50,000.

Statement showing MLP as finance charges and principal component payable:

Year	Outstanding Amount (₹)	MLP (₹)	Finance Charger @ 15% (IRR)	Principal component
1	10,50,000	4,50,000	1,57,500	2,92,500
2	757500	4,50,000	1,13,625	3,36,375
3	421125	4,84,200	63,075	4,21,125
	Total	13,84,200	3,34,200	10,50,000

6. (a) Khan International Ltd. is developing a new production process. During the financial 31st March 2013, the total expenditure incurred on this process was ₹150 lakhs. The production process met the criteria for recognition as an intangible on 1st December, 2012. Expenditure incurred till this date was ₹66 lakhs.

Further expenditure incurred on the process for the financial year ending 31st March, 2014, the recoverable amount of know-how embodied in the process is estimated to be ₹216 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to work out:

- (i) What is the expenditure to be charged to be profit and loss account for the financial year ended 31st March, 2013? (Ignore depreciation for this purpose).
- (ii) What is the carrying amount of the intangible asset as at 31st March 2013?
- (iii) What is the expenditure to be charged to profit and loss account for the financial year ended 31st March 2014? (Ignore depreciation for this purpose).
- (iv) What is the carrying amount of the intangible asset as at 31st March, 2014? [1+1+3+2]

(b) XYZ Ltd's shares are currently selling at ₹26 per share. There are 20,00,000 shares outstanding. The firm is planning to raise ₹40 lakhs to finance a new project to be started soon at Mumbai.

You are required to calculate the ex-right price of shares and the value of a right.

- (i) The firm offers one right share for every two shares held
- (ii) The firm offers one right share for every four shares held
- (iii) How does the shareholder's wealth change from (i) to (ii) above? How does right issue increases shareholder's wealth? [3+3+2]

Answer to 6 (a):

- (i) Expenditure incurred up to 1-12-2012 will be taken up to profit and loss account for the financial year ended 31-03-2013 = ₹66 lakhs.
- (ii) Carrying amount as on 31-03-2013 will be the expenditure incurred after 1-12-2012 = ₹84 lakhs [i.e., the expenditure incurred since the date the recognition criteria were met i.e., on 1-12-2012].

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(iii) Book Cost of intangible asset as on 31-03-2014 is worked out as :

Carrying amount as on 31-03-2013	₹84 lakhs
Expenditure during 2013-14	<u>₹240 lakhs</u>
Total Book Cost	₹324 lakhs
Recoverable amount, as estimated	₹216 lakhs
Difference to be charged to profit and loss accounts impairment= ₹ (324-216)	₹108 lakhs

(iv) Carrying amount of intangible asset as at 31-03-2014

	₹(lakhs)
Total Book Cost	324
Less: Impairment loss	108
Carrying amount as on 31-03-2014	216

Answer to 6 (b):

(i) When firm offers 1 right share for every 2 shares held:

$$\text{Therefore, no of shares to be issued} = 20,00,000 \times \frac{1}{2} = 10,00,000$$

$$\text{Pre-right} = \frac{5,20,00,000 + 40,00,000}{30,00,000} = 18.67$$

$$\text{Subscription price} = \frac{40,00,000}{10,00,000} = 4$$

$$\text{Value of right} = \frac{\text{₹}(18.67 - 4)}{2} = \text{₹}7.34$$

(ii) When firm offers one right share for every four shares held :

$$\text{No. of shares issued} = 20,00,000 \times \frac{1}{4} = 5,00,000$$

$$\text{Pre-right} = \frac{5,20,00,000 + 40,00,000}{25,00,000} = 22.4$$

$$\text{Subscription price} = \frac{40,00,000}{5,00,000} = 8$$

$$\text{Value of right} = \frac{\text{₹}(22.4 - 8)}{4} = \text{₹}3.6$$

(iii) Since right issue is constructed in such a way so that shareholder's proportionate share will remain unchanged shareholder's wealth does not change from (i) to (ii).

Right issue increases shareholder's wealth because the cost of issuing right shares is much lower than the cost of a public issue.

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7. (a) Milton Consulting Ltd. is a firm that specializes in offering management consulting services to software companies.

Milton Ltd. reported operating income (EBIT) of ₹306 lakh and net income of ₹135 lakh in the most recent year. However, the firm's expenses include the cost of recruiting new consultants and the cost of training which amounts to ₹60 lakh. A consultant who joins Milton Consulting Ltd. stays with the firm, on an average, for 4 years. Recruitment and training expenses are amortizable over 4 years immediately following the year in which they are incurred. Over the past 4 years the expenses are:

Year	Training, Recruitment Expenses (₹in lakh)
Current	60
Year 1	48
Year 2	45
Year 3	36
Year 4	30

Assuming a linear amortization schedule (over 4 years)

Estimate:

- (1) The value of human capital asset and the amount of training and recruitment expenses amortization for this year.
- (2) The adjustment to operating income. [4+2]

- (b) A company has been making a machine to order for a customer but the customer has, however, since gone into liquidation and there are no prospects than any money will be obtained from the winding up of his company.

Cost incurred to-date in manufacturing the machine are ₹1,00,000 and progress payments of ₹30,000 have been received from the customer prior to the liquidation. The sales department has found another company willing to buy the machine for ₹68,000 once it is completed. To complete the work, the following costs have to be incurred:

- (1) Material – These have been bought at a Cost of ₹12,000. They have no other use and if the machine is not finished, they would be sold as scrap for ₹4,000.
 - (2) Further labour costs would be ₹16,000. Labour is in short supply and if the machine is not finished, the workforce would be switched over to another job, which earns ₹60,000 in revenue, and incurs direct costs (not including direct labour) of ₹24,000 and absorbs (fixed) overhead of ₹16,000.
 - (3) Consultancy fees ₹8,000. If the work is not completed, the consultant's contract would be cancelled at a cost of ₹3,000.
 - (4) General overheads of ₹16,000 would be added to the cost of the additional work.
- Should the new customer's offer be accepted? Prepare a statement showing the economics of the proposition. [9]

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Answer to 7 (a):

Milton Consulting Ltd.

Year	Training, Recruitment Expenses (₹in lakh)	Unamortization portion (₹in lakhs)	Amortization this year (₹in lakhs)
Current	60	60 (100%)	---
Year 1	48	36 (75%)	12
Year 2	45	22.5 (50%)	11.25
Year 3	36	9 (25%)	9
Year 4	30	0	7.5

(1) The value of human capital assets as at the end of current year is ₹127.50 lakhs and amount of training and recruitment expenses amortization by debit to P&L account this year is ₹39.75 lakhs.

(2) Adjusted Operating Income.

= Operating Income + training & recruitment expenses – amortization of expenses this year

= (306 + 60 – 39.75) lakhs

= ₹326.25 lakhs.

Answer to 7 (b):

By an incremental analysis we can find the answer to the question: whether the new customer's offer is accepted or not.

Particulars	Amount (₹)	Amount (₹)
Incremental sales revenue		68,000
Less: incremental relevant and opportunity costs		
(1) Cost of material-sale of scrap	4,000	
(2) Cost of direct labour	16,000	
(3) Incremental opportunity cost of contribution foregone on another job:		
Sales Revenue	60,000	
Less: Direct Costs		
Labour	(16,000)	
Other direct costs	<u>(24,000)</u>	20,000
(4) Incremental cost of consultancy	(8,000 – 3,000)	<u>5,000</u> (45,000)
Incremental Profit		23,000

Decision – The new customer's offer should be accepted.

8. Write Short Notes on any three

[5×3= Marks]

- (i) Reasons for mergers and acquisition.**
- (ii) Net realizable value of Inventories**
- (iii) Walter's valuation Model.**
- (iv) Fair Market value of Intangible assets**
- (v) Characteristic of Brand**

Answer to 8 (i):

Reasons for mergers and acquisitions

There are a number of reasons for mergers and acquisition, why two companies may be worth more together, than when they are apart. These are given below:

- (1) Economies of Scale:** Economies are stated to accrue in terms of sharing central services such as procurement, accounting, financial control, human resources management and development, and top-level management and control.
- (2) Economies of Vertical Integration:** Organizations seek to attain economies by moving both forward and backward. Reliance Industries is a classic case, as it set up its polymer plants to cater to its textile operations, moved back further to set up petroleum refinery and then moved forward to set up its own outlets for petroleum products. The current trend of all metallurgical companies such as Tata Steel, SAIL, JSW Steel, Vedanta and Hindalco to acquire mines across the globe is a classic example.
- (3) Complementary Resources:** When two companies have a complimentary resource that is each having what the other needs, they may see some logic to come together. The recently announced decision of HP to acquire EDS appears to be for these reasons.
- (4) Investible Surplus Funds:** When organizations have investible surplus funds, that had not been distributed to the shareholders as higher dividends or bonus stocks, they look for investment opportunities. Organizations that have excess cash and do not payout to their shareholders or invest it through acquisitions may become targets of take-over.
- (5) Eliminating Inefficiencies:** Organizations with unexploited opportunities to cut costs and improve revenues become take-over targets of organizations with better management. Consider Tata Motors' recent acquisition of Jaguar and Land Rover: The key here is the ability of Tata Motors to implement cost savings at JLR. What will help assess the long-term impact of the acquisition 90 the profitability of Tata Motors is how much of the marquee brands' component sourcing can actually be done from India....."

Answer to 8 (ii):

Net realizable value of Inventories

Inventories are valued at a lower of the cost and net realizable value. This principle is based on the view that assets should not be carried in excess of amounts expected to be realized from their sale. Cost of inventories may not be recoverable for various reasons like:

- (a) Inventor/ being damaged
- (b) Inventories becoming obsolete
- (c) Market price having declined
- (d) Production cost has increased

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Thus, net realizable value of inventories is defined as the estimated selling price in the ordinary course of business less the estimated cost of completion and the estimated cost necessary to make the sale. It is estimated on the basis of the most reliable evidence at the time of valuation. It would be preferable to collect market price of various items of inventories as on the balance sheet date from different markets in which the goods are sold. A weighted average price should then be determined. However, here it is necessary to keep in view the volatility in price in general and the future prices of inventories. An estimate of the marketing expenses should also be made while valuing the inventories.

Answer to 8 (iii):

Walter's valuation Model.

Prof. Walter's theory is that in the long-run the share price reflect only the present value of expected dividends. Retentions influence stock price only through their effect on future dividends. In this view the investment policy of a firm cannot be separated from its dividend policy. The firm would have an optimum dividend policy which will be determined by the relationship or its internal rate of return and its cost of capital.

Assumptions

- (1) All financing is done through retained earnings: external sources of funds like debt or new equity capital are not used.
- (2) With additional investments undertaken, the firm's business risk does not change. It implies that r and k are constant.
- (3) There is no change in the key variables, namely, beginning earnings per share, E , and dividends per share, D . The values of D and E may be changed in the model to determine results, but, any given value of E and D are assumed to remain constant in determining a given value.
- (4) The firm has perpetual (or very long) life.

Answer to 8 (iv):

Fair Market value of Intangible assets:

Any intangible asset acquired is value on the basis of the fair value of the asset, Intangible assets include

- (a) Computer software
- (b) Patents
- (c) Copyrights
- (d) Mining rights
- (e) Quotas
- (f) Marketing rights, etc.

Three important criteria are used to identify an intangible asset. They are: identifiability, control and existence of future economic benefits.

Using the quoted market price in an active market could derive the fair market values of intangibles.

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The appropriate market price is the current bid price. In the absence of such a price, the price quoted in a transaction for similar intangible asset can provide a basis for deriving fair value.

Otherwise, the amount, which the business unit would have paid in arm's length transaction between knowledgeable and willing parties, is taken as the fair market value.

However, finally it must be admitted that if the fair value of the intangible asset cannot be measured reliably, that asset is not recognized as separate intangible but included in the goodwill.

Answer to 8 (v):

Characteristics of Brand: A Brand is an intangible asset; Some see it as a name or a symbol or a logo. Its associated tangible and emotional attributes is intended to identify the goods/services of one seller in order to differentiate them from those of competitors.

A Brand designates a product, as being different from competitors' product by signaling certain key values specific to a particular brand. It is the associations, which consumers make with the brand that establish an emotional and rational pact between the supplier and the customer.

A Brand is the medium through which consumers identify their experiences with the product offerings of the company. The name of the company is often forgotten but the brand remains in the mind of the consumers.

- (i) Brand identity is an effective form of advertising and marketing.
- (ii) Brand identity helps create an image for the public and potential customers.
- (iii) Brand identity develops over time due to successful products.
- (iv) Brand identity is associated with quality products.
- (v) Branded products are normally trusted by the public and customers.
- (vi) It is assumed that branded products have been extensively tried and tested before release.
- (vii) Brands usually help build up customer loyalty.
- (viii) Branded products are often used by individuals to help them build their own personal image. People, especially young people, build their desired image through their use and display of branded products.
- (ix) Brand identity helps customers distinguish between similar products, manufactured by different companies.
- (x) Brand identity is often associated with innovation.
- (xi) Brand identity is usually associated with good design.
- (xii) Companies try to emulate and even copy branded products.
- (xiii) Brands always have a distinctive logo/symbol.
- (xiv) Brand identity creates and maintains interest in products.

The Top 7 Characteristics of Successful Brands

With the volume of competition that businesses face in most industries, it's never been more important to stand out and develop a unique identity and value proposition through strategic branding. While it's obviously important to offer a quality product or service, effective branding is often at the heart of the companies that thrive.

According to [Jerry McLaughlin](#), "brand is the perception someone holds in their head about you, a product, a service, an organization, a cause, or an idea. Brand building is the deliberate and skillful application of effort to create a desired perception in someone else's mind."

Let's explore the common characteristics of successful brands, so you can build your brand accordingly.

1. Audience Knowledge

The best brands have a thorough understanding of the demographics of their target market, what their interests are, and how they communicate. Unless it's a mega chain like Wal-Mart, most businesses have a specific target audience they're pursuing. Understanding the target market is critical because it provides direction for the tone and reach of a marketing campaign, along with the overall identity of a brand, while helping to create an organic between a business and its audience.

Trying to appeal to everyone (ie, ignoring the concept of a target market) can be counterproductive, causing a company's brand to become diluted. Finding the right branding approach requires first understanding the target market.

2. Uniqueness

Establishing a brand identity requires something distinctive. For instance, Apple has become known worldwide for their innovative products and minimalistic, aesthetic appeal. When it comes to service companies, Domino's Pizza used to guarantee that their pizza would arrive in 30 minutes or it'd be free. In terms of a selling point, TOMS shoes donates a free pair of shoes to a child in need for every pair of shoes that are bought.

Creating an identity within a niche doesn't demand a revolutionary idea. It simply needs to have one special thing that separates it from the competition. In reality, it's possible to be "a one trick pony" as long as that trick is really good. Once a company figures out what that is, it can concentrate on it and should gain recognition in time.

Do you know what your unique product, service, or selling point is within your niche? If not, start there when building your branding strategy.

3. Passion

While it's certainly possible to build a brand in the short-term without passion, it's almost impossible to sustain it in the long run. When you examine massively successful people like

Steve Jobs, they all have a serious passion that keeps propelling them to work hard and continually deliver greatness. That passion leads to enthusiasm and genuine joy, which is infectious.

Consumers often become just as enthusiastic about a product or service, leading to word of mouth advertising and referrals. Passion also helps businesses persevere through inevitable setbacks.

4. Consistency

When consumers come back to a business for repeat sales, they usually expect to receive the same level of quality as they did the first time. Restaurants and their food and service quality are a great example of this.

No one wants to deal with a company they can't rely on for consistency. With so many industries being saturated with competitors, inconsistency is often enough of a reason for consumers to take their business elsewhere.

That's why it's so important to adhere to a certain quality standard with a product or service. An example of a brand who offers amazing consistency is McDonald's. This powerhouse of the fast food world provides patrons with a menu that's consistent across the world. Whether someone orders in Florida or China, they know that a Big Mac is going to taste the same.

5. Competitiveness

Gaining an edge in today's business world isn't easy. For a brand to make a name for itself, team members should thrive on competition and constantly strive to improve. This is the main principle behind Seahawks Coach Pete Carroll's book, *Win Forever*, as well as the way he runs the team.

When it comes to the major players in any industry, none simply sit back and hope that their consumers will do the work for them. Instead, they tend to be the movers and shakers who work tirelessly toward building and optimizing their brand, going above and beyond consumer expectations. The end result tends to be a brand that is continually on the cutting edge of its industry.

6. Exposure

Another big part of being recognized as a distinctive, successful brand is the ability to reach consumers through multiple channels. Obviously, larger companies have an advantage gaining exposure because they usually have a bigger marketing budget and more existing connections. They can pay for television commercials, be featured in globally-recognized magazines, and rank highly in search engine results pages.

However, the Internet and social media have narrowed the gap between small companies and large ones. There are more tools than ever before which offer any company a chance at establishing their brand. By developing a presence on networks like Facebook, Twitter, LinkedIn and Google+, anyone is able to reach almost any consumer. You just have to know

how (that's the hard part). Here are some resources I recommend for help with that component:

7. Leadership

Just like any thriving community or sports team, there's typically an influential leader behind every successful brand. For large companies, this may be the CEO. For smaller ones, it's usually the owner.

To coordinate the efforts of team members and guide a strategic vision for a brand, someone has to step up and steer the ship. The leader resolves complications and acts as a liaison between different departments to keep everyone on the same page. They are also expert motivators and know how to maximize the strengths of different team members.