FINAL EXAMINATION

June 2015

F–P18(BVM)
Syllabus 2008

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.*

1. (a) State whether the following statements are true or false: 1×5=5

(i) Expected future yield is very low for a stock with very high P/E ratio.

(ii) Under Asset based valuation approach individual assets are valued and aggregated in the process of finding the enterprise value.

(iii) Exchange ratio of equity shares of merging firms is determined by their market price alone.

(iv) Preference shareholders in normal circumstances, have no voting rights.

(v) According to basic valuation model, the value of a financial asset is present value of its expected future cash flows.

(b) Fill in the blanks by using the words / phrases given in the brackets: 1×10=10

(i) ________________ is one in which security prices fully reflect the available information. (Efficient Market/Stock Market)

(ii) Tobin's Q compares the market value of a company with the ______________ of its assets. (replacement cost/book value)

(iii) ________________ involves splitting up of a large company such as a conglomerate comprising of different divisions, into separate companies. (Amalgamation/Demerger)

(iv) Intangible assets are treated as ________________ assets. (Fictitious/Fixed)

(v) Assets held as stock in trade are ________________ . (investments/not investments)

(vi) In DCF valuation, the value of an asset is present value of ________________ cash flows on the asset. (actual/expected)

(vii) In the ________________ Approach, the key relationships are computed for a group of similar companies or transactions as a basis for valuation of companies involved in a merger or takeover. (Comparable companies/Industry/Real Option)

(viii) ________________ is a measure of value of which tells whether a company is able to generate returns that exceed the costs of capital employed. (Economic Value Added/Market Value Added/ Enterprise Value Added)

Please Turn Over

(ix) Recent acquisition shows that the price paid for an acquired company is almost invariably higher than its book value and the difference is incorporated under conventional accounting practice as________________ . (capital reserve/goodwill)

(x) The equity value of a company is the value of the ________________ claims of the company. (shareholders/creditors)

(c) In each of the questions given below one out of the four options is correct. Indicate the correct answer: 2×5=10

(i) The cost of capital is not similar to one of the following:

(A) Cut-off rate

(B) Hurdle rate

(C) Target rate

(D) Internal rate of return

(ii) If value of A Ltd. is 50, B Ltd. is 20 and on merger their combined value is 90 and A Ltd. receives premium on merger 12, the synergy for merger is (all amounts are in ₹ Lakhs)

(A) 8

(B) 20

(C) 32

(D) 38

(iii) X Ltd's share beta factor is 1.40. The risk free rate of interest on government securities is 9%. The expected rate of return on the company equity shares is 16%. The cost of equity capital based on CAPM is–

(A) 15.8%

(B) 16%

(C) 18.8%

(D) 9%

(iv) If a company has a P/E ratio of 20 and a ROE (Return on Equity) of 15% then the Market to Book Value Ratio is–

(A) 3 times

(B) 3%

(C) Cannot be calculated from the given information

(D) None of the above

(v) P intends to acquire R (by merger) based on market price of the shares. The following information is available of the two companies.

	P	R
No. of Equity shares	10,00,000	6,00,000
Earning after tax	50,00,000	18,00,000
Market value per share	₹ 30	₹ 25

New EPS of R after merger?

(A) ₹ 4.00

(B) ₹ 4.05

(C) ₹ 4.60

(D) ₹ 4.53

2. (a) XYZ Ltd. purchased plant and machinery on April 15, 2014 for ₹ 36 Lakhs on 180 days credit from ABC Ltd. and accordingly, it made the entries in the books. On May 16, 2014, the company entered into an agreement with ABC Ltd. with the following details: 5

- ₹ 2 Lakhs of cash discount would be given by ABC Ltd., if the company makes the payment by May 20, 2014.
- ABC Ltd. would waive off ₹ 4 Lakhs if the company makes a payment of ₹ 30 Lakhs as a final settlement by May 20, 2014.

XYZ Ltd. made all necessary payments by May 20, 2014 to ABC Ltd. and thus, settled the account with ABC Ltd. After the completion of the transaction with ABC Ltd., XYZ Ltd. credited Cash Discount of ₹ 2 Lakhs received and an income by way of waiver of ₹ 4 Lakhs in statement of Profit and Loss for the year 2014-15 and the necessary depreciation was provided on ₹ 36 Lakhs.

You are required to comment on the appropriateness of the accounting treatment done by XYZ Ltd. regarding the purchased Plant and Machinery as mentioned above in the light of AS – 10: Accounting for Fixed Assets.

(b) Consider two companies – X Company Limited and Y Company Limited. Both have announced their annual results for 2014-2015 on May 10, 2015 and as per the reported results both are having Profit After Tax (PAT) of ₹ 5,700 Lakhs and 120 Lakhs equity shares outstanding (face value of each share is ₹ 10). Both the companies having same networth of ₹ 28,500 Lakhs. 10

X Company Limited has growth plans in future and accordingly, it has decided to have a low payout of 40% as dividend. It is believed that its earnings will increase by present rate of growth every year in perpetuity. Assume that the company is having the required rate of return on equity of 15% a year.

Y Company Limited has growth plans in future but not very ambitious and due to that, it is going to have a dividend payout of 60%. It is believed that its earnings will increase by the present rate of growth every year in perpetuity. Assume that the company is having the required rate of return on equity of 13% a year.

Assume that both the companies are identical in all other aspects. Calculate P/E Ratio assuming that Constant Growth Model works. Also explain why a particular company is having higher P/E Ratio.

3. (a) Calculate the value of the intangible assets of X Ltd. considering the excess returns earned by it, from the following information for the y. e. 31.03.2015. 5

(i) Average PBT ₹ 6,300 Lakhs

(ii) Average year end tangible assets ₹ 35,000 Lakhs

(iii) Cost of equity of the company is 15%

(iv) Return on Assets (ROA) industry average is 12%

(v) Tax rate is 30%

(b) Why are intangible assets like brands increasingly important for company's management? 5

(c) What are the primary reasons for mergers of companies? 5

4. A Ltd. is considering takeover of either B Ltd. or C Ltd. or both. The financial data for the three companies are as follows:

Particulars	A Ltd.	B Ltd.	C Ltd.
Equity Capital [₹ Lakhs] (Fave Value ₹ 10 each)	450	180	100
Earnings [₹ Lakhs]	90	24	24
Market Price per share [₹]	60	42	48

Exchange ratio is based on market price per share. Total earnings and market capitalization after merger are the aggregate of stand – alone earnings and market capitalization of the compaines. For the different combinations possible you are required to –

(a) Calculate EPS of the merged companies. 8

(b) Calculate Price earnings ratios of the merged companies. 4

(c) Will you recommend merger with either/both of the companies on the basis of EPS? Justify your answer. 3

5. (a) What are the limitations of DCF Valuation? 5

(b) The following information is provided related to the acquiring firm Mark Limited and the target firm Mask Limited:

	Mark Ltd.	Mask Ltd.
Profit after tax (PAT)	₹ 2,000 Lakhs	₹ 400 Lakhs
Number of Shares outstanding	200 Lakhs	100 Lakhs
P/E ratio	10	5

You are required to calculate –

(i) What is the swap ratio based on current market price? 2

(ii) What is the EPS of Mark Ltd after acquisition? 2

(iii) What is the expected market price per share of Mark Limited after acquisition, assuming P/E ratio of Mark Limited remains unchanged? 2

(iv) Determine the market value of the merged firm. 2

(v) Calculate gain/loss for shareholder of the two independent companies after acquisition. 2

6. (a) From the following details, compute according to Lev and Schwartz (1971) model the total value of human resources for employee groups – skilled and un-skilled. 8

	Skilled	Un-skilled
(i) Annual average earning of an employee till age of retirement	₹ 1,00,000	₹ 60,000
(ii) Age of retirement	65 years	62 years
(iii) Discount rate	20%	20%
(iv) No. of employees in the group	25	20
(v) Average age	62 years	60 years

It is assumed that employees will leave the organization only on retirement.

(b) State the reasons and implication for restructuring of a firm. 7

7. The summarized Balance Sheet of Hobson Ltd. as on 31.03.2015 is as under:

Balance Sheet as at 31.03.2015 (Figures in ₹)

Liabilities	₹	Assets	₹
80000 equity shares of ₹ 10 each	8,00,000	Goodwill	80,000
1000 10% Debentures of ₹ 100 each	1,00,000	Land and Buildings	4,20,000
Profit & Loss Account	5,80,000	Plant & Machinery (after depreciation)	4,10,000
General Reserve	2,40,000	Inventories	5,45,000
Sundry Creditors	3,10,000	Sundry Debtors	4,30,000
		Bank	1,45,000
	20,30,000		20,30,000

Profit after tax for three years 2011-12, 2012-13 and 2013-14, after charging debenture interest were ₹ 2,30,200, ₹ 3,50,500 and ₹ 2,50,000 respectively.

Additional information:

(a) The normal rate of return is 12% on the net assets attributed.

(b) Goodwill may be calculated at 4 times the adjusted average super profits of the three years referred to above.

(c) The value of Land and Building is to be ascertained on the basis of 10% return. The current rental value is ₹ 70,000 per year.

(d) Rate of tax – 50%.

(e) Profits for 2012-13 included profits from a transaction of a non-recurring nature of ₹ 29,680.

(f) A provision of ₹ 20,500 on debtors made in earlier years is no longer required and this is to be adjusted in the profits of 2013-14.

(g) A Contingent Liability of ₹ 10,500 has become an actual liability which is to be adjusted in the year 2013-14.

You are required to ascertain the value of Goodwill of the company. The capital employed may be taken as on 31.03.2014 for the purpose. 15

8. In recent board meeting of Hard Touch Ltd., it was decided to increase the company's presence in the southern part of India and for that, it is further decided to acquire Soft Touch Ltd. and merged it with itself. In this respect, you have been provided the following information:

Balance Sheet as on March 31, 2015 *(₹ in Crores)*

Equities and Liability	*Hard Touch Ltd*	*Soft Touch Ltd*
Equity Share Capital (₹ 10 par)	6,000.00	2,500.00
Reserves and Surplus	5,750.00	3,650.00
Shareholders' Funds	11,750.00	6,150.00
Non-Current Liabilities:		
Long Term Debt	3,775.00	2,435.00
Deferred Tax liabilities (Net)	675.00	250.00
Curent Liabilities	1,775.00	985.00
Total Liabilities	17,975.00	9,820.00
Assets		
Non-Current Assets:		
Net Fixed Assets	10,275.00	6,700.00
Investments	2,250.00	375.00
Current Assets	5,450.00	2,745.00
Total Assets	17,975.00	9,820.00

Profit and Loss Account for the year ending on March 31, 2015 *(₹ in Crores)*

Particulars	*Hard Touch Ltd*	*Soft Touch Ltd*
Income:		
Net Revenue	42,150.00	22,305.00
Other Income	925.00	955.00
Total Income	43,075.00	23,260.00
Less: Expenses		
Total Operating Expenses	25,613.14	14,780.70
Operating Profit	17,461.86	8,479.30
Less: Interest	319.00	265.00
Profit Before Tax	17,142.86	8,214.30
Less: Tax	5,142.86	2,464.29
Profit After Tax	12,000.00	5,750.01
Price/Earnings Ratio	21.65	15.75

Since Hard Touch Ltd. has a policy of maximizing EPS, it is decided to consider the exchange ratio (or swap ratio) on the basis of Book Value, EPS and Market Price of both the companies and select that which maximizes EPS.

On the basis of the above information, you are required to answer the following:

(i) Determine the exchange ratio or swap ratio for the said merger that will maximize EPS post merger. It is estimated that there are likely to be some synergy gains which will increase the earnings of new merged entity by 5%.

(ii) Assuming that the Price/Earnings Ratio of Hard Touch Ltd. after merger will be 24.50, determine the market price of the share of Hard Touch Ltd.

10+5=15