FINAL EXAMINATION

December 2013

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) Whenever the yield on a bond is more than coupon rate, the bond will be trading at a discount.

(ii) Price to Book Value (P/B) Ratio is a positive function of Price/Earning (P/E) Ration but a negative function of Return on Equity.

(iii) Increasing the company's future Economic Value Added is key to creating shareholder value.

(iv) Hedging protects against the price risk but not against gains or losses.

(v) Systematic risk of a portfolio is diversifiable.

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

(i) Premium paid by target company to buy-back its shares from a potential acquirer is called __________ (Green Shoe Option/Green Bid/Greenmail)

(ii) __________ represents the sale of a segment of a company to another entity. (Curve-Out/Spin-Off/Divestitures)

(iii) The __________ Test requires that the expected profit stream of an acquired business provide an attractive return on the total acquisition cost and on any new capital investment needed to sustain or expand its operations. (Cost-of-Entry/Cost-of-Exit/Cost of Making Conglomerate)

(iv) The CAPM model assumes __________ market competition. (perfect/imperfect)

(v) In case of Deep Discount Bonds, the issue price is always __________ the face value. (less than/more than)

(vi) Under constant growth model, the required return (k) is __________ the constant rate of growth (g). (greater than/less than)

(vii) The __________ the market price and the book value is an indication of intellectual capital if the shares are widely held and traded for a non-cyclical firm. (sum of/difference between)

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

(ix) Shares of listed companies which are traded on the stock exchange are __________. (quoted/unquoted)

(x) __________ makes the calculation of share value difficult (stable dividend/variable dividend)

Please Turn Over

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

(i) If the risk free rate at present in the economy is 7.50%, the cost of equity of XYZ Ltd. is 16% and the expected return on the market portfolio is 12.50% then the Beta of the company will be

(A) 1·35

(B) 1·50

(C) 1·60

(D) 1·70

(ii) A company is having Profit after tax of ₹ 500 crores, and Return on Equity 25%. If it has a Reserves and Surpluses of ₹ 1,000 crores, and equity share with a face value of ₹ 2 per share, then its Book Value per share will be

(A) 2·00

(B) 4·00

(C) 5·00

(D) 8·00

(iii) Which one is the advantage of DCF valuation

(A) It is not based upon an asset's fundamentals

(B) It is not the right way to think about what an investor would get when buying an asset

(C) It forces an investor to think about the underlying features of the firm and understand its business

(D) All of these

(iv) Which Accounting Standard is issued by the Institute of Chartered Accountants of India on Accounting for Amalgamation

(A) AS—9

(B) AS—12

(C) AS—14

(D) AS—18

(v) In defending against a hostile takeover, the strategy that involves the target firm creating securities that give their holders certain right that become effective when a takeover is attempted is called __________ strategy.

(A) Shark repellent

(B) Green mail

(C) Poison pill

(D) Golden parachute

2. (a) The following financial statements have been extracted from the Annual Report 2012-13 of Fine Cable Ltd.

BALANCE SHEET of Fine Cable Limited as at March, 31 (₹ in Crores)

Particulars	2012	2013
EQUITY AND LIABILITIES		
Shareholders' Funds:		
Share Capital		
Equity Capital	250.00	250.00
Preference Share	60.00	60.00
Reserves and Surplus	7,694.30	8,933.20
	8,004.30	9,243.20
Non—Current Liabilities		
Long—Term Borrowings	1,162.20	1,451.50
Other Long—Term Liabilities	1.80	13.60
Long—Term Provisions	342.10	528.30
Deferred Tax Liabilities (Net)	326.10	344.70
	1,832.20	2,338.10
Current Liabilities		
Short—Term Borrowings	383.20	171.10
Trade Payables	563.80	632.90
Other Current Liabilities	1,189.90	1,391.20
Short—Term Provision	187.10	264.90
	2,324.00	2,460.10
TOTAL EQUITY AND LIABILITIES	12,160.50	14,041.40
ASSETS		
Non—Current Assets		
Fixed Assets:		
Tangible Assets	4,291.90	4,120.70
Intangible Assets	0.40	0.40
Capital Work-In-Progress	120.20	357.30
	4,412.50	4,478.40
Non—Current Investments	2,188.80	2,173.90
Long—Term Loans and Advances	40.20	166.50
Other Non—Current Assets	121.00	190.80
	6,762.50	7,009.60
Current Assets:		
Current Investments	183.30	1,067.00
Inventories	2,811.40	3,296.30
Trade Receivables	1,140.90	1,496.50
Cash and Bank Balances	490.00	398.10
Short—Term Loans and Advances	772.40	771.80
Other Current Assets	-	2.10
	5,398.00	7,031.80
TOTAL ASSETS	12,160.50	14,041.40

Statement of Profit and Loss of Fine Cable Limited for the Year ending on March, 31

(₹ in Crores)

Particulars	2012	2013
Income		
Revenue From Operations (Gross)	21,826.40	24,235.30
Less : Excise Duty	1,184.80	1,528.50
Revenue From Operations (Net)	20,641.60	22,706.80
Other Income	319.90	241.70
Total Revenue	20,961.50	22,948.50
Expenses		
Cost of Materials Consumed	15,769.50	17,129.20
Purchase of Stock-in-Trade	24.00	60.40
(Increase)/Decrease in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade	126.90	(296.80)
Employee Benefit Expenses	260.70	133.80
Depreciation, Amortization and Impairment	394.70	466.30
Other Expenses	2,234.60	2,671.50
Total Expenses	18,810.40	20,164.40
Profit Before Interest and Tax	2,151.10	2,784.10
Less : Interest	663.37	583.04
Profit Before Tax	1,487.73	2,201.06
Less : Tax @ 34%	505.83	748.36
PROFIT AFTER TAX	981.90	1,452.70

Miscellaneous Information about the Company:

1. Face Value of the Equity Share of the Company — ₹ 2 per share
2. Face Value of the Preference Share of the Company — ₹ 10 per share
3. The Company is paying regular Dividend on Preference Shares at the rate of 10%.
4. The Company has declared an Equity Dividend of 60% for the Year 2012-13.
5. Beta of the Company — 1·25
6. Promoters' Holding — 62·59%
7. The Market Rate of Return — 15·60%
8. Risk Free Interest Rate — 7·75%

On the basis of the above and assuming that the Company will not change its debt structure in future, preference shares will be redeemed but will be replaced by 10% Preference Shares of the same amount, will not change its Dividend-Payout Ratio and there is no Dividend Distribution Tax; you are required to determine Intrinsic Value of the Share using Constant Growth Model. 9

(b) M. Ltd. agrees to acquire N. Ltd. based on the capitalization of last three years profits of N. Ltd. at an earning yield of 25%

Profits of N. Ltd. for the years	₹ (in lakhs)
2010	75
2011	89
2012	82

Calculate the value of business based on earning yield basis. 6

3. (a) Consider the following information in respect of Blue Chip Limited. 11

(₹ In Crores)

	2013	2014	2015	2016	2017	2018
Total Revenue	57.73	69.86	81.74	92.37	100.66	107.72
Cost of Goods Sold	23.93	29.93	35.24	39.72	42.28	45.76
Gross Profit	33.80	39.93	46.50	52.65	58.38	61.96
Administrative Expenses	3.56	4.38	5.11	5.72	6.07	6.55
Selling and Distribution Expenses	18.26	23.14	27.91	32.19	35.53	38.37
Depreciation	4.70	2.43	1.59	1.27	2.18	1.83
EBIT	7.28	9.98	11.89	13.47	14.60	15.21

Additional Information

Marginal Tax Rate	33.90%	33.90%	33.90%	33.90%	33.90%	33.90%
Increase in Operating Working Capital	3.30	3.60	4.00	4.10	4.20	4.30
Capital Expenditure	0.61	0.66	0.61	0.78	0.92	0.71

Assuming that the company is having 3.5 crores of equity shares, Debt of ₹ 0.75 crores, steady growth rate of 8% in free cash flows after 2018 and weighted Average Cost of Capital (WACC) of 12.5%, determine the value of its share using free cash flow valuation method.

Year	1	2	3	4	5	6	7
Discounting factor @ 12.5%	0.8889	0.7901	0.7023	0.6243	0.5549	0.4933	0.4385

(b) A company is expected to generate future profits of ₹ 54,00,000. What is its value of business if investment of this type of business are expected to give an annual return of 20%? 4

4. (a) A company has issued 14% convertible debentures of ₹ 100 each at par. Each debenture will be convertible into 8 equity shares of ₹ 10 each at a premium of ₹ 5 per share. The conversion will take place at the end of 4 years. The corporation tax rate is assumed to be 40% including education cess and surcharge, if any. The prevailing coupon rate of similar bonds in the market is 15%.

Assume that tax savings occur in the same year that the interest payments arise. The flotation cost is 5% of the issue amount. Calculate the cost of convertible debentures. (Discount factor @ 14%, 1-4 years is 2.914 and @ 15%, 1-4 years is 2.855; Discount factor for 4th year @ 14% is 0.592 and @ 15% is 0.572) 10

(b) Discuss the limitations of discounted cash flow valuation. 5

5. (a) A company acquired for its internal use a software on 28.01.2012 from the USA for US $ 1,00,000. The exchange rate on that date was ₹ 52 per US dollar.

The seller allowed trade discount @ 5%. The other expenditure were

(i) Import Duty	: 20%
(ii) Purchase Tax	: 10%
(iii) Entry Tax	: 5% (Recoverable later from tax department)
(iv) Installation expenses	: ₹ 25,000
(v) Profession fees for clearance from customs	: ₹ 20,000

Compute the cost of software to be capitalized. 10

(b) What are the bases for valuation? 5

6. (a) The following information relates to the business of a firm 11

(i) Average capital employed in the business ₹ 7,20,000.

(ii) Net trading profits of the firm for the past three years after taxation were ₹ 1,07,600, ₹ 90,700 and ₹ 1,12,500

(iii) Reasonable return expected in the same type of business is 10%.

(iv) Fair remuneration to the partners for their services is ₹ 12,000 per annum.

You are required to calculate the value of Goodwill—

(i) On the basis of five year's purchase of the annual average super profits.

(ii) On the basis of capitalization of the annual average super profits at the reasonable return of 10 percent, &

(iii) On the basis of annuity of super profits, taking the present value of annuity of one rupee for five years at 10% interest is ₹ 3.78.

(b) The Following are the operating results of a firm:

Sales (Units)	25,000
Interest per annum	₹ 30,000
Selling price per unit	₹ 24
Tax rate	35% including education cess etc.
Variable cost per unit	₹ 16
Fixed cost per annum	₹ 80,000

Compute operating leverage and financial leverage 4

7. (a) Negotiation is going on for transfer of A. Ltd. on the basis of Balance Sheet and the additional information as given below :

Balance Sheet of A. Ltd.
As on 31st March, 2012

Liabilities	Amount (₹)	Assets	Amount (₹)
Share Capital (₹ 10 fully paid up share)	10,00,000	Goodwill	1,00,000
Reserves & Surplus	4,00,000	Land & Building	3,00,000
Sundry Creditors	3,00,000	Plant & Machinery	8,00,000
		Investment	1,00,000
		Stock	2,00,000
		Debtors	1,50,000
		Cash & Bank	50,000
Total	17,00,000	Total	17,00,000

Profit before tax for 2011-12 amounted to ₹ 6,00,000 including ₹ 10,000 as interest on investment. However, an additional amount of ₹ 50,000 per annum shall be required to be spent for smooth running of the business. Market value of the land & building and plant & machinery are estimated at ₹ 9,00,000 and ₹ 10,00,000 respectively. In order to match the above figures further depreciation to the extent of ₹ 40,000 should be taken into consideration. Income tax rate may be taken at 30%. Return on capital @ 20% before tax may be considered as normal for this business for the present stage.

For the purpose of determining the rate of return profit for this year after the aforesaid adjustments may be taken as expected average profit. Similarly, average trading capital employed is also to be considered on the basis of position in this year.

It has been agreed that a three years purchase of super profit shall be taken as the value of goodwill for the purpose of the deal. You are requested to calculate the value of goodwill for the company. 10

(b) Which are the forces driving mergers and acquisitions activities? 5

8. ABC Garments Ltd. is a company which produces and sells to retailers a certain range of fashion clothing. They have made the following estimates of prudential cash flows for the next 10 years. 15

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow (₹ in lakhs)	1500	1700	2000	2500	3000	3400	3800	4500	5000	6000

DCF Ltd. is a company which owns a series of boutiques in a certain locality. The boutiques buy clothes from various suppliers and retail them. Each boutique has a manager and an assistant but all purchasing and policy decisions are taken centrally. An independent cash flow estimate of DCF Ltd. was as follows;

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow (₹ in lakhs)	120	160	200	280	340	460	520	600	660	800

ABC Garments Ltd. is interested in acquiring DCF Ltd. in order to get some additional retail outlets. They make the following cost-benefit calculation;

(i) Net value of assets of DCF Ltd.

	₹ in lakh
Sundry fixed assets	800
Investments	200
Stock	400
Total	1400
Less : Sundry Creditors	400
Net Assets	1000

(ii) Sundry fixed assets amounting to ₹ 50,00,000 cannot be used and their net realisable value is ₹ 45,00,000

(iii) Stock can be realised immediately at ₹ 470 lakh.

(iv) Investments can be disposed off for ₹ 212 lakhs.

(v) Some workers of DCF Ltd. are to be retrenched for which estimated compensation is ₹ 130 lakh.

(vi) Sundry creditors are to be discharged immediately.

(vii) Liabilities on account of retirement benefits not accounted for in the balance sheet by DCF Ltd. is ₹ 48 lakhs.

(viii) Expected cash flows of the combined business will be as follows:

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow (₹ in lakhs)	1800	1900	2300	2950	3500	4000	4500	5300	5800	6900

Find out the maximum value of DCF Ltd. which ABC Garments Ltd. can quote. Also show the difference in valuation had there been no merger. Use 20% as discount factor.

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @ 20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615