FINAL EXAMINATION

December 2014

P–20(FABV)
Syllabus 2012

Financial Analysis & Business Valuation

Time Allowed: 3 Hours

Full Marks: 100

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

SECTION A

In this section, answer Question No. 1(a) and 1(b) *which is compulsory and* any two *parts out of* Question No. 2(a), 2(b) and 2(c).

1. (a) Following information has been extracted from the Annual Report of a well established Indian biscuit manufacturer:

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

Particulars	2013	2014
EQUITY AND LIABILITIES		
Shareholder's Funds:		
Share Capital (Face Value—₹ 2)	23.89	23.91
Reserves and Surplus	496.15	612.50
	520.04	**636.41**
Non-Current Liabilities (Bank Loans and Debentures)	**173.04**	**223.04**
Current Liabilities		
Short-term borrowings	–	145.08
Trade Payables	336.20	333.61
Other Current Liabilities (Interest Payable)	518.26	210.49
Short-Term Provisions (Dividend Payable) (*Amount of Dividend Proposed for the year including Dividend Distribution Tax*)	124.80	134.40
	979.26	**823.58**
Total Equity and Liabilities	**1,672.34**	**1,683.03**
ASSETS		
Non-Current Assets:		
Tangible and Intangible Assets	1,065.11	1,140.11
Less: Depreciation & Amortization	250.75	297.58
	814.36	**842.53**
Current Assets:		
Current Investments	210.54	163.54
Inventories	382.28	338.57
Trade Receivables	52.14	77.12
Cash and Bank Balances	30.94	64.48
Short Term Loans and Advances	182.08	196.79
	857.98	**840.50**
Total Assets	**1672.34**	**1,683.03**

Statement of Profit and Loss for the ending on March 31, *(₹ in crores)*

Particulars	2013	2014
Revenue from operations	5,007.22	5,635.21
Other Income (Gain on the Sale of Old Machine)	25.50	35.75
Total Income	**5,032.72**	**5,670.96**
Expenses		
• Raw materials including packaging materials consumed	2,655.01	2,890.42
• Purchase of stock-in-trade	529.53	638.18
• Changes in inventories of finished goods, work-in-progress and stock-in-trade	(4.79)	(10.16)
• Employee benefits expenses	145.87	143.50
• Interest Costs	38.07	37.74
• Depreciation and Amortization expense	47.32	57.08
• Other expenses	1,369.34	1,582.02
• Tax expenses	65.63	98.31
Total Expenses	**4,845.98**	**5,437.09**
Profit After Tax	**186.74**	**233.87**

Notes:

(i) The Company has paid bank loan of ₹ 50 crores during the year 2013-14 and raised necessary amount by issuing Debentures. After repaying the banks loan, the proceeds were used to buy the fixed assets.

(ii) Fixed Assets sold during F.Y. 2013-14 were having original cost of ₹ 25 crores with accumulated depreciation of ₹ 10.75 crores.

Required:

I. Calculate Cash from Operating Activities for the F. Y. 2013-14. 2

II. Calculate Cash from Investing Activities for the F. Y. 2013-14. 2

III. Calculate Cash from Financing Activities for the F. Y. 2013-14. 2

IV. Calculate Free Cash Flows to the Company for the F. Y. 2013-14. 2

V. Calculate Free Cash Flows to equity owners for the F. Y. 2013-14. 2

1. (b) The following financial data has been extracted from the Annual Report 2013-14 of XYZ Ltd.

Balance Sheet of XYZ Ltd. as at March 31, (₹ *in crores)*

Particulars	2013	2014
EQUITY AND LIABILITIES		
Shareholder's Funds:		
Share Capital	638.07	638.07
Reserves and Surplus	18,496.77	18,538.58
	19,134.84	**19,176.65**
Non-Current Liabilities:		
Long-Term Borrowings	8,051.78	9,746.45
Deferred Tax Liabilities (Net)	1,963.91	43.11
Other Long-Term Liabilities	1,238.44	1,155.48
Long-Term Provisions	691.19	815.20
	11,945.32	**11,760.24**
Current Liabilities:		
Short-Term Borrowings	6,216.91	4,769.08
Trade Payables	8,455.02	9,672.36
Other Current Liabilities	4,923.10	2,463.18
Short-Term Provisions	1,509.58	1,892.91
	21,104.61	**18,797.53**
TOTAL EQUITY AND LIABILITIES	**52,184.77**	**49,734.42**
Assets		
Non-Current Assets:		
Fixed Assets:		
Tangible Assets	12,287.71	12,133.50
Intangible Assets	3,168.03	3,107.07
Capital Work-in-Progress	1,507.84	1,716.85
Intangible Assets under development	3,244.96	4,638.22
	20,208.54	**21,595.64**
Investments:		
Non-Current Investments	18,171.71	18,357.57
Long Term Loans and Advances	3,575.24	2,918.30
Other Non-Current Assets	94.32	123.85
	21,841.27	**21,399.72**

Current Assets:		
Current Investments	1,762.68	100.85
Inventories	4,455.03	3,862.53
Trade Receivables	1,818.04	1,216.70
Cash and Bank Balances	462.86	226.15
Short Term Loans and Advances	1,532.09	1,223.77
Other Current Assets	104.26	109.06
	10,134.96	**6,739.06**
TOTAL ASSETS	**52,184.77**	**49,734.42**

Statement of Profit and Loss of XYZ Ltd. for the year ending on March 31, *(Rs. in crores)*

Particulars	**2013**	**2014**
REVENUE FROM OPERATIONS	52,319.73	41,758.00
Less: Excise duty	(4,554.01)	(3,469.89)
	47,765.72	38,288.11
OTHER INCOME	2,088.20	3,833.03
TOTAL REVENUE	**49,853.92**	**42,121.14**
***EXPENSES*:**		
(i) Cost of materials consumed	27,244.28	20,492.87
(ii) Purchase of products for sale	5,864.45	5,049.82
(iii) Changes in inventories of finished goods, work-in-progress and products for sale	(143.60)	371.72
(iv) Employee cost/benefits expense	3,253.20	3,417.55
(v) Finance cost	1,387.76	1,337.52
(vi) Depreciation and amortization expense	1,817.62	2,070.30
(vii) Product development expense/Engineering expense	425.76	428.74
(viii) Other expense	7,783.32	6,987.53
(ix) Expenditure transferred to capital and other accounts	(953.80)	(1,009.11)
TOTAL EXPENSES	**46,678.99**	**39,146.94**
PROFIT/(LOSS) BEFORE TAX	**3,174.93**	**2,974.20**
Tax (net)	1,466.88	1,360.32
PROFIT AFTER TAX FOR THE YEAR FROM CONTINUING OPERATIONS	**1,708.05**	**1,613.88**

Additional Information:

- The Equity Capital of the Company consists of Ordinary shares and 'A' Ordinary share, both of ₹ 5 each.
- The holders of 'A' Ordinary shares shall be entitled to receive dividend for each financial year at five percentage point more than the aggregate rate of dividend declared on Ordinary shares for that financial year.
- In respect of every Ordinary shares (whether fully or partly paid), voting rights shall be in the same proportion as the capital paid up on such Ordinary share bears to the total paid up Ordinary share capital of the Company. In case of every 'A' Ordinary share, if any resolution is put to vote on a poll or by postal ballot at any general meeting of shareholders, the holder shall be entitled to one vote for every ten 'A' Ordinary shares held as per the terms of its issue and if a resolution is put to vote on a show of hands, the holder of 'A' Ordinary shares shall be entitled to the same number of votes as available to holders of Ordinary shares.
- The number of Ordinary shares and of 'A' Ordinary shares (in Crores) are 107.41 and 20.20 respectively.
- The Company has declared 75% dividend on Ordinary Shares for the F.Y. 2012-13 and 100% for the F.Y. 2013-14.

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

(i) Determine Basic Earning Per Share (EPS) of both the type of shares for the F.Y. 2012-13 and for the F.Y. 2013-14. (Ignore Dividend Distribution Tax) 6

(ii) Determine the P/E Ratios of Ordinary Shares as on March 31, 2013 and March 31, 2014 using the EPS calculated in (i) above and prices of ₹ 124 and ₹ 118 per share respectively. 2

(iii) Determine the Price to Book Value per share of Ordinary Shares as on March 31, 2013 and March 31, 2014 for the prices in (ii) above. 2

2. (a) (i) H Ltd. is not performing satisfactorily for some years. Following are the financial data provided to you. (All amounts are in ₹ lakhs).

Balance Sheet as at 31-03-2014 (abstract)

Equity share capital	230	Fixed Assets	1400
Reserve and Surplus	105	Current Assets	500
Long term loans	960	Profit & Loss (Dr)	175
Current Liabilities	780		
	2075		2075

Net Loss for the year: 190
EBIT: 100
Sales: 2400
Depreciation written off: 96
Preliminary expenses written off: 38
Market Capitalization: 275

(I) Ascertain the stage of sickness based on NCAER parameters. 4

(II) Compute value of Z and comment on sickness of the company using Altman's model. 6

(ii) What is Off–Balance Sheet financing? 5

2. (b) The extract of balance sheets and income statements of M/s Novel Company over the last 3 years are as follows:

(₹ *in thousand*)

Particular	2011	2012	2013
Cash	561	387	202
Receivable	1963	2870	4051
Inventories	2031	2613	3287
Current Assets	**4555**	**5870**	**7540**
Net Fixed Assets	2581	4430	4364
Total Assets	**7136**	**10300**	**11904**
Payable	1862	2944	3613
Accruals	301	516	587
Bank Loan	250	900	1050
Current Liabilities	**2413**	**4360**	**5250**
Long term debt	500	1000	950
Share holders equity	4223	4940	5704
Total Liabilities and equity	**7136**	**10300**	**11904**
Sales	11863	14952	16349
Cost of goods sold	8537	11124	12016
Selling, general and administrative expenses	2349	2659	2993
Profit before taxes	977	1169	1340
Taxes	390	452	576
Profit after taxes	587	717	764

You are required to:

a. Prepare common size statement, and 9

b. Comment on the trends in the company's financial condition and performance. 6

2. (c) (i) Following financial extracts are provided from the accounts of Lotus Ltd. You are required to calculate ROA with the help of Asset Turnover Ratio and ROE with the help of Equity Multiplier under Du Pont analysis and compare the performance of the company over the years in terms of amounts and in terms of ratios. 7

(₹ *in thousands*)

Particular	2013	2012	2011	2010
Net Income	438	423	410	395
Revenue	2620	2450	2340	2240
Assets	1588	1468	1400	1335
Equity	790	726	685	650

(ii) If P/E ratio is low, Earnings Yield is high. Do you think it signals future earnings to grow? Explain. 2

(iii) When P/E ratio is high do you expect higher forward P/E? Explain. 2

(iv) Explain whether and in what way residual earnings and abnormal earnings growth are relevant to evaluation of P/B and P/E ratios. 4

SECTION B

In this section, answer Question No. 3(a) and 3(b) *which is compulsory and* any two *parts out of* Question No. 4(a), 4(b) and 4(c).

3. (a) Healthy Ltd. is planning to takeover Dull Ltd. and merged it with itself. The following information has been taken from the books of both the companies:

Balance Sheet as on March 31, 2014

(*₹ in crores*)

Equity and Liabilities:	Healthy Ltd.	Dull Ltd.
Equity Share Capital	4,000.00	2,200.00
Reserves and Surplus	5,250.00	3,250.00
Shareholders' Funds	**9,250.00**	**5,450.00**
Non-Current Liabilities:		
Long Term Debt	3,000.00	1,375.00
Deferred Tax Liabilities (Net)	670.00	450.00
Current Liabilities	2,060.00	1,340.00
Total Liabilities	**14,980.00**	**8,615.00**
Assets		
Non-Current Assets:		
Net Fixed Assets	9,745.00	4,310.00
Investments	1,650.00	900.00
Current Assets	3,585.00	3,405.00
Total Assets	**14,980.00**	**8,615.00**

Profit and Loss Account for the year ending on March 31, 2014

(₹ *in crores)*

Particulars	Healthy Ltd.	Dull Ltd.
Income:		
Net Revenue	30,150.00	12,529.00
Other Income	460.00	900.00
Total Income	30,610.00	13,429.00
Less Expenses:		
Total Operating Expenses	20,135.00	6,214.00
Operating Profit	10,475.00	7,215.00
Less: Interest	375.00	171.88
Profit Before Tax	10,100.00	7,043.12
Less: (Tax @ 30%)	3,030.00	2,112.93
Profit After Tax	7,070.00	4,930.19
Price/Earning Ratio	21.80	15.25

Notes:

- Face Value of both companies shares is ₹ 10.
- There will not be any synergy gain after merger of the companies.
- The management of Healthy Ltd. believes that the P/E Ratio of the merged entity will be 22.50.

The management wants to determine the exchange ratio or swap ratio for the said merger in such a manner that the market price per share of the merged entity is maximum. Therefore, you are required to determine a suitable exchange ratio or swap ratio based on Book Value per share or EPS or Market Price per share so that the market price per share of the merged entity is maximum. 10

3. (b) (i) Dhyan Ltd. has announced issue of warrants on 1 : 1 basis for equity shareholders. The warrants are convertible at an exercise price of ₹ 12. Warrants are detachable and trading at ₹ 7. What is the minimum price of the warrant and what is the warrant premium if the current price of the stock is ₹ 16? 4

(ii) Calculate economic value added (EVA) with the help of the following information of Moon Ltd. 4

Financial Leverage: 1.4 times;

Equity capital ₹ 170 lakhs;

Reserve and surplus ₹ 130 lakhs;

10% debentures ₹ 400 lakhs;

Cost of equity: 15%

Income tax: 30%

(iii) Can EVA signal value destroying when ROI is rising? 2

4. (a) (i) What are the misconceptions about valuation? 5

(ii) 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, 2014

Liabilities	Amount (₹)	*Assets*	Amount (₹)
Share Capital (₹ 10 fully paid up share)	10,00,000	Goodwill	1,00,000
Reserve & 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 2013-14 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

4. (b) Frontier Company Limited (FCL) is in negotiation for taking over Back Moving Company Limited (BMCL). The management of FCL is seeing strong strategic fit in taking over BMCL provided it is a profitable proposition. Mr. Guha, GM (Finance) has been asked to look into the viability of the probable takeover of BMCL. He has collected the following necessary information.

Summarized Balance Sheet of Back Moving Company Limited (BMCL) as on March 31, 2014.

Liabilities	*Amount (₹ in crores)*
Share holder's Fund:	
Equity Share Capital (₹ 10 par)	200.00
12% Preference Capital (₹ 100 par)	75.00
Reserve and Surplus	125.00
	400.00

Non-Current Liabilities:	
10% Debentures	40.00
Long Term Loan	25.00
	65.00
Current Liabilities:	24.75
Total Liabilities	489.75
Assets	
Non-Current Assets:	
Net Fixed Assets	332.75
Investments	125.00
	457.75
Current Assets:	
Inventories	10.00
Debtors	15.00
Cash in Hand and at Bank	4.25
Loans and Advances	1.75
	31.00
Miscellaneous Expenses to the extent not written off	1.00
Total Assets	489.75

Proposed Purchase Consideration:

- 10.50% Debentures of FCL for redeeming 10% Debentures of BMCL—₹ 44 crore.
- 11% Convertible Preference Shares of FCL for the payment of Preference Shareholders of BMCL—₹ 100 crore.
- 12.50 crores of Equity Shares of FCL would be issued to the shareholders of BMCL at the prevailing market price of ₹ 20 each.
- FCL would meet all dissolution expenses of ₹ 0.50 crores.

The management of FCL would dispose any asset and liability which may not be required after takeover:

• Investments	₹ 150 crores
• Debtors	₹ 15 crores
• Inventories	₹ 9.75 crores
• Payment of Current Liabilities	₹ 25 crores
• All intangible assets will be written off	

The management of FCL would like to run the taken over company, BMCL, for next 7 years and after that, it would discontinue with it. It is expected that for the next 7 years, the taken over company would generate the following yearly operating cash flows after tax:

	1	2	3	4	5	6	7
Operating Cash Flows After Tax (₹ in crores)	70	75	85	90	100	125	140

It is estimated that the terminal cash flows of BMCL would be ₹ 50 crores at the end of 7th year.

If the cost of capital of FCL is 16%, then you are required to find out whether the decision to takeover BMCL at the terms and conditions mentioned above will be a profitable decision? 15

Year	1	2	3	4	5	6	7
Discounting Factor @ 16%	0.8621	0.7432	0.6407	0.5523	0.4761	0.4104	0.3538

4. (c) ABC Ltd is engaged in power projects. As part of its diversification plans, the company proposes to put up a windmill to generate electricity. The details of the scheme are as follows:

Sl. No.	Particulars
1.	Cost of the windmill, ₹ 300 lakhs
2.	Cost of the land, ₹ 15 lakhs
3.	Subsidy from State Govt. to be received at the end of 1st year of installation ₹ 15 lakh.
4.	Cost of electricity will be ₹ 2.25 per unit in year 1. This will increase by ₹ 0.25 per unit every year till year 7. After that, it will increase every year by ₹ 0.50 per year till year 10.
5.	Maintenance cost will be ₹ 4 lakh in year 1 and the same will increase by ₹ 2 lakh every year.
6.	Estimated life is 10 years
7.	Cost of capital is 15%
8.	Residual value is nil. However, land value will go up to ₹ 60 lakh at the end of year 10.
9.	Depreciation will be 100% of the cost of the windmill in year 1 and the same will be allowed for the tax purpose.
10.	The windmills are expected to work based on wind velocity. The efficiency is expected to be on an average 30%. Gross electricity generated at this level will be 25 lakhs unit per annum; 4% of which will be committed to the State Electricity Board as per the agreement.
11.	Tax rate is 35%

From the above information you are required to compute the net present value. Ignore tax on capital profit. Use present value up to 2 digit. 15