FINAL EXAMINATION

P–20(FABV)

JUNE 2015

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) You are analyzing the financial statements of Sky Ltd. using ratio accounting tools. Extracts of the financial information for the year ended on 31.03.2014 are summarized as follows:

Abridged Balance Sheet as at 31.03.2014

Liabilities	₹ Lakhs	*Assets*	₹ Lakhs
Equity share capital	160	Fixed Assets	600
Reserves	260	Inventory	75
12% Bank Loan	200	Receivables	90
Creditors	200	Cash and Bank	55
Total	820	Total	820

Abridged Statement of profit for y. e. 31.03.2014

Particulars	₹ Lakhs
Sales (all on credit)	750
Cost of Goods Sold	500
Sundry Expenses	66
Depreciation	40
Interest Expenses	24
Tax Expenses (25%)	30
Profit after tax	90

Additional Information:

Particulars	₹ Lakhs
Cash from operating activities	130
Cash used in investing activities	(50)
Cash used in financing activities	(45)

Daily operational expenses (₹ lakhs) 2; Annual loan repayment installment (₹ lakhs) 20; The management of the company claims that the liquidity position of the company is sound although the current ratio is poor.

Please Turn Over

(i) Compute Current ratio, Quick ratio, Interval Defensive ratio, working capital turnover ratio, receivables turnover ratio, creditors turnover ratio and inventory turnover ratio and examine the liquidity position of the company paying due regard to cash flow information and give your comment as to tenability of the views of the management. 7

(ii) Assess the company's ability to service debt by use of interest coverage ratio and debt service coverage ratio. 3

(b) (i) Following figures have been extracted from the records of Agni Ltd.

Year	2013	2014
Sales (₹)	2,60,000	3,60,000
Cost of Goods Sold (₹)	2,00,000	3,30,000
Gross Profit (₹)	60,000	30,000

It is learnt that cost price for the year 2014 has increased by 10% over the year 2013. Account for changes in gross profit in the year 2014. 6

(ii) During the past financial year, M & N Ltd., had net income of ₹ 1,00,000 and paid dividends of ₹ 52,000 to its preferred stockholders. M & N's equity share account showed the following:

		No. of shares
April 1	Shares issued and outstanding at the beginning of the year	10,000
July 1	Shares issued for cash	4,000
December 1	Shares repurchased for the treasury	3,000

Compute the weighted average number of equity shares outstanding during the year, and compute EPS. 4

2. (a) From the following extracts of the GAAP statements prepare Reformulated Profit and Loss Statement dividing items into operating, financing and other comprehensive income categories for the year ended on 31.03.2014 and Reformulated Statements of Shareholders' Equity showing Owners' transaction and Comprehensive Income separately as at 31.03.2014 in order to facilitate financial analysis: (all amounts are in ₹ lakhs)

Statement of Shareholder's Equity

	Equity Shares	Other Comprehensive Income	Retained Earnings
Balances at 31st March, 2013	260	154	288
Repurchase of shares	(24)		
Dividend			(15)
Issue of shares to employees	36		
Net Income			204
Foreign Currency Transaction		25	
Gain on hedging instruments		74	

Profit and Loss statement for the year ended on 31.03.2014

	Note No.	31.03.2014
Revenue from operations		3,785
Other income		
Cost of material consumed		
Purchase of product for sale		
Changes in inventory		
Employee costs		
Finance cost	1	23
Depreciation		
Other expenses	2	3,490
Tax expenses		68

Note 1: Finance costs	31.03.2014
Interest expenses	26
Interest income	13
Loss on retirement of debt	10
Total	23

Note 2: Other Expenses	31.03.2014
Cost of Sales	2,287
Selling, general and administrative expenses	1,203
Total	3,490

Footnote: Tax on investment income/(loss) is at 37.5% effect of which is included in tax expenses.

9+6=15

(b) Growel Ltd. is contemplating an expansion by taking over the business of Subwel Ltd. at a price of ₹ 100 crore to be paid in cash. The estimated financial performance for the current year, on the verge of completion, and the projected performance after proposed expansion are presented below:

	Current Year	After Expansion
EBIT ₹ lakh	2,300	3,800
Interest ₹ lakh	1,000	–
No. of Shares (lakh)	100	–
P/E Multiple	12	–

Growel Ltd. considers three alternatives for funding acquisition–A: All Equity funding, B: Equal amounts of Debt and Equity, and C: All Debt option.

Equity shares have to be offered at ₹ 95 per share. Loans are available at 10% rate of interest.

P/E ratio would vary on the basis of financing of the expansion: 11.6 for all equity, 11 for equal debt and equity and 9 for all debt option.

Advise management of Growel Ltd. as to its expansion and financing thereof if the tax rate is 35%.

15

(c) (i) Using Altman's (1968) model compute the Z value of business 'A Ltd.', from the provided data (Balance Sheet extract) and comment whether it is on the verge of financial ruin.

A Ltd. Balance Sheet (extract)

(All Figures in ₹)

Liabilities		*Assets*	
Share capital of ₹ 10 each	1,00,000	Fixed Assets	2,10,000
Reserves & Surplus	30,000	Inventories	90,000
10% Debentures	1,50,000	Book Debts	35,000
Sundry Creditors	40,000	Loans and advances	10,000
Outstanding Expenses	30,000	Cash and bank	5,000
	3,50,000		3,50,000

Additional information:

(i) Market value per share ₹ 15

(ii) Operating profit (25% on sales) ₹ 2,00,000 13

(ii) What do you mean by 'Corporate Distress Prediction'? 2

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) (i) From the following extracts of financial data pertaining to HS Ltd., an IT company, you are required to calculate the value of the brand of the company:

Year ended on 31st march	2014	2013	2012
EBIT ₹ lakhs	750	525	280
Non-branded income ₹ lakhs	60	45	15
Inflation (%)	8	15	11
Remuneration of capital	6% of Average Capital Employed		
Average capital employed ₹ lakhs	1,450		
Corporate tax rate	30%		
Capitalization factor	15%		

6

(ii) The following information is available of a concern. Calculate Economic Value Added (EVA).

12% Debt ₹ 2,000 crores
Equity capital ₹ 500 crores
Reserves and Surplus ₹ 7,500 crores
Risk-free rate 9%
Beta factor 1.05
Market rate of return 19%
Equity (market) risk premium 10%
Operating profit after tax ₹ 2,100 crores
Tax rate = 30% 4

3. (b) (i) National Textile Corporation belongs to a risk-class for which the appropriate PE ratio is 15. It currently has 75,000 outstanding shares selling at ₹ 150 each. The corporation is contemplating declaration of dividend @ ₹ 12 per share at the end of the current fiscal year, which has just started. Given the assumption of Modigliani Miller approach, answer the following questions:

(i) What will be the price of the share at the end of the year, if:

(a) dividend is not declared?

(b) dividend is declared?

(ii) Assuming that the corporation pays dividend, has net income of ₹ 7,50,000 and makes new investments of ₹ 15,00,000 during the period, how many new shares must be issued? 3+3=6

(ii) What is Valuation Multiple? Give examples of *any four* multiples. 4

4. (a) The following is the Balance Sheet of N. Ltd. as on 31st March, 2015:

Liabilities	₹	*Assets*	₹
4,00,000 Equity shares of ₹ 10 each fully paid	40,00,000	Goodwill	4,00,000
13.5% Redeemable preference shares of ₹ 100 each fully paid	20,00,000	Building	24,00,000
General Reserve	16,00,000	Machinery	22,00,000
Profit and Loss Account	3,20,000	Furniture	10,00,000
Bank Loan (Secured against fixed assets)	12,00,000	Vehicles	18,00,000
Bills payable	6,00,000	Investments	16,00,000
Creditors	31,00,000	Stock	11,00,000
		Debtors	18,00,000
		Bank Balance	3,20,000
		Preliminary Expenses	2,00,000
	1,28,20,000		1,28,20,000

Further information:

(i) Return on capital employed is 20% in similar businesses.

(ii) Fixed assets are worth 30% more than book value. Stock is overvalued by ₹ 1,00,000. Debtors are to be reduced by ₹ 20,000. Trade investments, which constitute 10% of the total investments are to be valued at 10% below cost.

(iii) Trade investments were purchased on 01-04-2014, 50% of non-trade investments were purchased on 01-04-2013 and the rest on 01-04-2012. Non-trade investments yielded 15% return on cost.

(iv) In 2012-2013 new machinery costing ₹ 2,00,000 was purchased but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% per year on written down value method.

(v) In 2013-2014 furniture with a book value of ₹ 1,00,000 was sold for ₹ 60,000, which was a one time disposal.

(vi) For calculating goodwill two years purchase of super profits based on simple average profits of last four years are to be considered. Profits of last four years are as under:

2011-1012 ₹ 16,00,000, 2012-2013 ₹ 18,00,000, 2013-2014 ₹ 21,00,000, 2014-2015 ₹ 22,00,000.

(vii) Additional depreciation provision at the rate of 10% on the increase in book value of Plant and Machinery alone may be considered for arriving at average profit.

(viii) Preference dividend has been paid till date.

Find out the intrinsic value of the equity share given that Income tax and dividend tax are not to be considered. 15

(b) (i) Futuristic Limited has the following portfolio of investments as on March 31, 2015:

(₹ in lakhs)

Particulars	Purchase Price	Market Price
Non –Current Investments	₹	₹
10 Years 10% Bonds (Current Market Yield is 9%)	1,160.00	1,064.00
Shares of X Limited (Subsidiary Company)	10.00	80.00
Shares of Y Limited (Subsidiary Company)	100.00	90.00
Shares of Z Limited (Subsidiary Company)	10.00	8.00
Shares of A Limited	120.00	110.00
Shares of B Limited	350.00	500.00
Current Investments		
Shares of XYZ Limited	250.00	260.00
Shares of ABC Limited	890.00	820.00
Units of Money Market Mutual Fund	15.00	12.00
Units of Growth Fund	22.00	25.00

You are required to compute the value of investment for balance sheet purpose assuming that the fall in value of investment Y Limited is temporary and that of Z Limited is permanent as per the relevant accounting standard. 5

(ii) There are a number of factors both macro economic and micro economic which have an impact on business. Valuation of a business involves making forecasts for the future. Comment on the sources of uncertainties in business valuation in the light of the above. 5

(iii) Assume that there are two firms—U (Unlevered) firm and L (Levered) firm. L has 10% Debentures of ₹ 5 crores, EBIT of both the firms are same, that is, ₹ 1 crores. The cost of equity of L and U are 16% and 12.50% respectively. Show, as per the MM Hypothesis, that there exists an arbitrage process which will make the value of both the firms same. 5

(c) The bidding company B Ltd. is contemplating a merger with the target company, T Ltd. so as to form the merged B Ltd. under two distinct situations X and Y. You are provided with the following information about the proposed merger:

Company	B Ltd.	T Ltd.
EAT (₹ lakh)	40	12.5
No. of Equity Shares (in lakh)	5	2
P/E ratio	12.5	20

Situation X:

There is no synergy in earnings, but P/E of merged B Ltd. will stand at 15. Merger is based on market value of shares.

Situation Y:

Post merger P/E stands at that of stand-alone B Ltd., but earnings of the merged entity rises by 20% over the aggregate earnings of B Ltd. and T Ltd. Swap ratio is 1.3 for every share of T Ltd.

Find for both the situations X and Y:

(i) Post merger EPS. 3

(ii) Post merger market value per share. 2

(iii) Synergy due to merger. 2

(iv) Gain/loss for merger to shareholders of B Ltd. and T Ltd. (a) in value of share holdings and (b) in earnings available to them. 4+4=8