FINAL EXAMINATION

December 2015

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) As credit manager of the bank, you have been approached by two companies for a loan of ₹ 1,00,000 for six months, with no collateral offered. Since the bank has almost exhausted its quota for loans of this type, only one of these requests can be granted. The relevant information supplied to you by the two companies is presented below:

Particulars	Company X	Company Y
Assets	(₹)	(₹)
Cash	1,70,000	3,00,000
Sundry Debtors	2,74,000	4,24,000
Stock	9,00,000	13,50,000
Total Current Assets	13,44,000	20,74,000
Other Assets	10,00,000	10,20,000
	23,44,000	30,94,000
Liabilities & Capital		
Current Liabilities	5,00,000	6,40,000
Long-term Loans	8,00,000	10,00,000
Equity Share Capital	8,00,000	12,00,000
Retained Earnings	2,44,000	2,54,000
	23,44,000	30,94,000
Additional Information		
Sales	24,00,000	17,00,000
Rate of gross profit on sales	30%	40%

Considering the above data specify the company which should be granted the credit. Explain your answer with reasons. 10

(b) Vipul Construction Corporation a proprietorship company has a contract to build a structure for ₹ 1,00,00,000 and a reliable estimate of the contract's total cost is ₹ 80,00,000. Project cost incurred by Vipul Construction Corporation is as follows:

Vipul Construction Corporation Cost of Project:

Year	Cost to be incurred
2012-13	₹ 40,00,000
2013-14	₹ 30,00,000
2014-15	₹ 10,00,000
Total	₹ 80,00,000

You are required to determine Vipul Construction Corporation's net income from this project for each year using the (i) percentage–of–completion and (ii) completed contract method. (iii) Which method will you recommend to the entity considering matching concept, ROI and taxation? 4+4+2=10

Please Turn Over

2. (a) (i) 'Trailing P/E Ratio is for evaluation while Forward P/E Ratio is for Valuation'. Comment on the statement and discuss the role of trailing P/E Ratio and Forward P/E Ratio. 5

(ii) What kind of conditions of a company are represented by the following pattern of cash flows? You are requested to provide your analysis of each case separately: 2×5=10

I. Net cash flows from Operating Activities are **positive**, net cash flows used in Investing Activities are **negative** and net cash flows from Financing Activities are **positive**.

II. Net cash flows from Operating Activities are **negative**, net cash flows used in Investing Activities are **positive** and net cash flows from Financing Activities are **negative**.

III. Net cash flows from Operating Activities are **negative**, net cash flows used in Investing Activities are **negative** and net cash flows from Financing Activities are **positive**.

IV. Net cash flows from Operating Activities are **positive**, net cash flows used in Investing Activities are **negative** and net cash flows from Financing Activities are **negative**.

V. Net cash flows from Operating Activities are **negative**, net cash flows used in Investing Activities are **positive** and net cash flows from Financing Activities are **positive**.

(b) (i) The following abridged financial information is given to you:

Balance Sheet of Mountain Ltd.

(₹ Crores)

Liabilities	31.03.2014	31.03.2015
Equity Share Capital	24	24
Long Term Liabilities	110	110
Current Liabilities	70	86
Total	**204**	**220**

Assets		
Fixed Assets	120	108
Current Assets	61	57
Profit and Loss	20	55
Preliminary Expenses	3	—
Total	**204**	**220**
Additional Information		
Depreciation Written Off	14	12
Preliminary Expenditure Written off	2	3
Net profit/(Loss)	16	(35)

Ascertain from above the stages of sickness of Mountain Ltd. on 31.03.2014 and on 31.03.2015. 4+4=8

(ii) From the following particulars of Z Ltd. find its cash flow from operation: 4

Particulars	₹ lakhs
Net Income	780
Depreciation	85
Impairment Loss	12
Profit on Sale of Land	12
Increase in Inventory	23
Decrease in Wages Payable	11
Increase in Deferred Tax Liability	8
Increase in Accounts Receivables	24

(iii) Enumerate different types of financial modeling on the basis of its usage in modeling of economy, industry and company. 3

(c) (i) Sunny Limited acquired 70% shares of Harry Limited on October 01,2014 at a price of ₹ 5,00,000. The balance of Profit and Loss account of Harry Ltd. is as under:

As on	Balance
April 01, 2014	₹ 80,000 Debit balance
March 31, 2015	₹ 1,60,000 Credit balance

Compute net share of Sunny Limited in the capital profit of Harry Limited at the time of Consolidation. 3

(ii) Zoom Limited acquired 80% of shares of Dark Limited on March 31, 2015 for consideration of ₹ 5,20,000. The share capital of Dark Limited comprises of 4000 Equity Shares of ₹ 100 each. The capital profit and revenue profits of Dark Limited were ₹ 3 lakh and ₹ 1 lakh on the date of acquisition. Compute the amount of minority interest as shown in the Consolidated Balance Sheet as on March 31, 2015. 3

(iii) X Limited acquired 70% of equity shares of Y Limited as on 31st March, 2015 at a cost of ₹ 70 lakhs. The total assets and other liabilities of Y Limited amounted to ₹ 278·50 lakhs and ₹ 140 lakhs respectively. Y Limited declared and paid dividend @ 20% on its equity shares (face value ₹ 10) as on 31st March, 2015. X Limited purchased the shares of Y Limited @ ₹ 20 per share. Compute the amount of goodwill/capital reserve on acquisition of shares of Y Limited. 4

(iv) Your company had the following balance sheet and income statement information for 2014.

Balance sheet:	**₹**
Cash	20
Accounts Receivable	1,000
Inventories	5,000
Total Current Assets	6,020
Net Fixed Assets	2,980
Total Assets	9,000

	(₹)
Debt	4,000
Equity	5,000
Total Liabilities & Capital	9,000

Income Statement:

Sales	10,000
Cost of Goods Sold	9,200
EBIT	800
Interest (10%)	400
EBT	400
Taxes (40%)	160
Net Income	240

This industry average inventory turnover is 5. You think you can change your inventory control system so as to cause your turnover to equal the industry average, and this change is expected to have no effect on either sales or cost of goods sold. The cash generated from reducing inventories will be used to buy tax—exempt securities which have a 7 percent rate of return. What will your profit margin be after the change in inventories is reflected in the income statement? 5

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) Give below is the Balance sheet of Laxmi Ltd. as on 31-03-2014:

Liabilities	₹ (In lakh)	**Assets**	₹ (In lakh)
Share Capital (Share of ₹ 10)	100	Land & Buildings	40
Reserves & Surplus	40	Plant & Machinery	80
Creditors	30	Investments	10
		Stock	20
		Debtors	15
		Cash at Bank	05
	170		**170**

You are required to work out the value of the company's shares on the basis of Net Assets method and Profit—earning capacity (capitalization) method and arrive at the fair price of the shares, by considering the following information:

(i) Profit for the current year ₹ 64 lakhs includes ₹ 4 lakhs extraordinary income and ₹ 1 lakh income from investments of Surplus funds, such Surplus funds are unlikely to recur.

(ii) In subsequent years, additional advertisement expenses of ₹ 5 lakh are expected to be incurred each year.

(iii) Market Value of Land and Buildings & Plant and Machinery has been ascertained at ₹ 96 lakhs and ₹ 100 lakhs respectively. This will entail additional depreciation of ₹ 6 lakh each year.

(iv) Effective income tax rate is 30% including all other charges.

(v) The Capitalization rate applicable to similar business is 16%. 10

(b) Consider two companies – Alpha Limited and Beta Limited. Both have announced their annual results for 2014-2015 on May 5, 2015 and as per the reported results both are having identical Profit After Tax (PAT) of ₹ 7,125 lakhs and 120 lakhs equity shares outstanding (face value of each share is ₹10). Both the companies having same net worth of ₹ 28,500 lakhs.

Alpha 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 17% a year.

Beta 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 15% 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.

8+2=10

4. (a) M Limited wants to takeover N Limited and their Summarized Balance Sheet as on March 31, 2015 are give below:

	M Limited (₹ in Crores)	N Limited (₹ in Crores)
Equity and Liabilities:		
Equity Capital – ₹ 10 each	500	175
Reserves and Surplus	750	475
Non-Current Liabilities	250	85
Current Liabilities and Provisions	175	65
Total	**1,675**	**800**
Assets:		
Non-Current Assets — Net fixed Assets	1,130	435
Current Assets	545	365
Total	**1,675**	**800**

Additional Information:

	M Limited	N Limited
(i) Profit After Tax (PAT)	₹ 78 crores	₹ 35 crores
(ii) Market Price Per Share	₹ 75.00	₹ 45.00

I. Using the above information, what should be the share exchange ratio to be offered to the shareholders of N Limited by M Limited based on:
   (i) Net Worth
   (ii) Earnings Per Share (EPS)
   (iii) Market Price

II. Suggest which one out of the above basis should be preferred by N Limited?

III. Assuming that there are no synergy gains, then determine the EPS after merger if the exchange ratio is one as suggested in (II) above.

9+2+4=15

(b) A firm is considering a project for introducing a new product line for which the acceptance in the market is uncertain. The relevant particulars are as follows:

(all amounts are in ₹ Lakhs)

	Probability	Estimated Cash Flows		
		Year 0	Year 1	Terminal Value at the end of Year 1
Investment		(26)		
Market Acceptance High	0.75		8	26
Market Acceptance Low	0.25		2	6

The project is not flexible to change according to the market acceptance of the product.

A modified project is also under consideration where after having knowledge about the market acceptance of the product in the first year the firm would enjoy Real Options to expand or to terminate the project. Accordingly, cash flows are modified for inclusion of the Real Option embedded in the modified project as stated below:

The Initial Outlay would increase from 26 to 30 (₹ lakh) and the first year Cash Flow would remain same. However, there would be additional cost for expansion/termination at the end of first year and Terminal Value at the end of the first year would also be different as stated below:

	Probability	Options Available at the end of first year	Additional Costs (₹ lakh)	Terminal Value at the end of first year (₹ lakh)
Market Acceptance High	0.75	Continue as before		26
		Real Option: Expand	(3)	49
Market Acceptance High	0.25	Continue as before		6
		Real Option: Terminate	(1)	13

The discounting rate to be applied in all cases is 10% per annum. You are required to:

I. Find Expected NPV of the original project and comment on its acceptability. 3

II. Draw a Decision Tree and Expected NPV of the modified project and comment on its acceptability. 3+6=9

III. Find Net Value of Real Options embedded in the modified project. 3

(c) (i) Hajela Ltd. had earned a Profit after tax of ₹ 48 lakhs for the year just ended. It wants you to ascertain the value of its business, based on the following information:

(1) Tax rate for the year just ended was 36%. Future tax rate is estimated at 34%.

(2) The company's equity shares are quoted at ₹ 120 at the balance sheet date. The company had an equity capital of ₹ 100 lakhs, divided into shares of ₹ 50 each.

(3) Profit for the year has been calculated after considering the following in the Profit & Loss account—

— Subsidy ₹ 2,00,000 received from Government towards fulfillment of certain social obligation. The Government has now discontinued this subsidy and hence, this amount will not be received in future.

— Interest ₹ 8,00,000 on term loan. The final installment of this term loan was fully settled in the last year.

— Managerial remuneration ₹ 15,00,000. The shareholders have approved an increase of ₹ 6,00,000 in the overall managerial remuneration from the next year onwards.

— Loss on Sale of fixed assets and investments amounting to ₹ 8,00,000. (Ignore tax effect thereon) 10

(ii) Define EVA. Also state the means to enhance EVA of a company? 5