Financial Analysis & Business Valuation
Group-A
(Answer Question 1 and 2 which are compulsory and any two from the rest)

Question 1
CRISIL Limited (December 2010)
Taxes on income
Tax expense comprises current, deferred, and wealth tax. Current income tax and wealth tax is measured at the amount expected to be paid to the tax authorities in accordance with the Indian Income Tax Act of 1961 enacted in India. Deferred income taxes reflects the impact of current year timing differences between taxable income and accounting income for the year and reversal of timing differences of earlier years. Deferred tax is measured based on the tax rates and the tax laws enacted or substantively enacted at the balance sheet date. Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to the taxes on income levied by same governing taxation laws.

Deferred tax assets are recognised only to the extent that there is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. In situations where the company has unabsorbed depreciation or carry forward tax losses, all deferred tax assets are recognised only if there is virtual certainty supported by convincing evidence that they can be realised against future taxable profits.

At each balance sheet date, the company re-assesses unrecognised deferred tax assets. It recognises unrecognised deferred tax assets to the extent that it has become reasonably certain that sufficient future taxable income will be available against which such deferred tax assets can be realised.

The carrying amount of Deferred Tax Assets is reviewed at each Balance Sheet date. The company writes down the carrying amount of a Deferred Tax Asset to the extent it is no longer reasonably or virtually certain, as the case may be, that sufficient future taxable income will be available against which Deferred Tax Asset can be realised. Any such write down is reversed to the extent that it becomes reasonably or virtually certain, as the case may be, that sufficient future taxable income will be available.

Income Tax
The tax year of the company being the year ending March 31, 2011, the provision for tax for the year is the aggregate of the provision made for the three months ended March 31, 2010 and the provision for the nine months up to December 31, 2010. The tax provision for nine months has been arrived at using the effective tax rate for the period April 1, 2010 to March 31, 2011, the ultimate tax liability of which will be determined for the period April 1, 2010 to March 31, 2011.

Components of Deferred Tax Assets and Liabilities are: (₹)

Particulars	As on Dec 31, 2010	As on Dec 31, 2009
Deferred Tax Liability		
Depreciation/ Amortisation	(67,477,222)	(29,313,871)
Tax attributable towards tax holiday deduction	(6,500,000)	-
Disallowance under section 40 (a)	-	(728,727)
Total (A)	(73,977,222)	(30,042,598)
Deferred Tax Asset		
Provision for Leave Encashment	55,498,929	44,590,724

Provision for Gratuity	15,186,273	2,007,830
Lease Rent amortisation	32,016,485	18,606,511
Provision for Bonus and Commission	67,865,625	29,096,571
Provision for bad debts	14,307,731	14,892,808
Deferment of Rating fees	8,826,779	8,756,658
Disallowance under section 40 (a)	2,038,599	-
Total (B)	195,740,421	117,951,102
Net Deferred tax Asset / (Liabilities) (A – B)	121,763,199	87,908,504

Read the above paragraphs carefully and answer the following questions —

(a) How effective tax rate is calculated? How it differs from marginal tax rate?

(b) What is a deferred tax asset? In the present case how deferred tax assets/liabilities are arrived?

(c) "At each balance sheet date, the company re-assesses unrecognised deferred tax assets." — Describe how the timing difference helps to re-assess the unorganized deferred tax assets in the instant case.

(d) Although preference dividends are not deductible in calculating taxes but tax benefit is recognised while preference dividends paid to an ESOP. — Justify it.

[4+5+3+3]

Question 2

Nature Care India Ltd.

Incorporated in 1974, Nature Care India Ltd. is a nature-based solutions company. The products manufactured by Nature Care India Ltd are broadly categorized into health care, personal care, and foods. The company has a far-reaching penetration into urban as well as rural India. Besides this it has global distribution networks spread across Central, North and South America, Australia, Asia, Middle East, North and South Africa, and East and West Europe.

From a strategic perspective, 2011-12 can be considered a positive inflexion point in Nature Care's long-term growth path. Having delivered good results in the last four years, even when the industry was undergoing adverse demand conditions, the company has spelt out its intent to entering a new growth trajectory. The new four-year plan aims at continuing the growth momentum across businesses so as to outperform the sector as a whole. Business strategies have been developed in consonance with the growth objectives, focusing on three key elements – expansion, innovation, and acquisition.

In view of this emerging growth potential across the various segments of its products the Board of Directors of Nature Care have decided to invest 150 crore in its different product segments during in the next two years. The investments will be made primarily to spruce up its R&D, supply chain, and IT infrastructure. The extremely high debt-equity ratio is evident from Table A. the extremely comfortable position in terms of coverage of its interest reflected in the excerpts of its income statement in Table B have been the key factors that have convinced the company management to raise the funds through public issue of non-convertible debentures (NCD).

Table A Own funds to borrowed funds

	Mar 2011 (₹ crore)	**Mar 2012 (₹ crore)**
Net worth	338.07	447.87
Reserves & surplus	309.43	390.54
Total borrowings	48.63	20.57
Secured borrowings	15.70	19.23
Unsecured borrowings	32.93	1.34
Current portion of long-term debt	8.06	00

Table B Excerpts of income statement

Profits/losses	Mar 2011 (₹ crore)	Mar 2012 (₹ crore)
PBDIT	186.72	239.85
Financial charges (incl. Lease rent)	4.65	5.73
PBDT	182.07	234.12
Depreciation	17.10	19.05
PBT	164.97	215.07
Tax provision	17.00	25.78
PAT	147.97	189.29
Appropriation of profits		
Dividends	81.37	114.39
Retained earnings	66.6	74.90

On 15th January 2013, the company management announced the public issue of debt to fund their capacity enhancement initiative. The debt offering was given AAA credit rating by CRISIL. The details of the financing plans of the firm are as follows:
Issue 1,50,00,000 non-convertible debentures with fixed interest rates. The issue price of debentures is ₹100, maturity is 9 years, and the rate of interest offered is 10.2%. The debentures have a call option and company can call the debentures anytime after 5 years. During January 2013, the following debt issues were made (Table C):

Table C Debt Issues

Name of the issuer	Rate	Maturity (Years)	Rating by the rating agency	Amount (₹ crore)	Type of instrument
LIC Housing Finance	9.10	10	AAA	265	Bonds
Punjab State Industrial Development Corn.	9.32	10	n.a.	30	Bonds
Rural Electrification Corporation Ltd.	8.85	10	AAA	500	Bonds
Sundaram Finance Ltd.	9.60	5	AA+	100	NCD
Yes Bank Ltd.	9.60	15	A+	75	Bonds
Bank of Rajasthan	9.50	10	A	100	NCD

Key market ratios (%) as on 31st January 2013 were as follows:

Type of Debt Securities	Rate of Interest
Government Securities	
10 Years	7.62
11 Years	7.79
15 Years	8.07
PSU Bonds (AAA) – 5 years	8.79
Treasury Bill	
91 days	6.98
182 days	7.32
364 days	7.39
Bank Rate	6.00
Commercial Paper (PR+1) – 90 days	9.40

A research report titled 'FMCG sector in India: Current Status and Future Outlook' released in the December 2012 read as follows:
Although the growth rate of FMCG sector came down to 11.3% in 2012-13 from 13.5% in 2011-12, India's fast moving consumer goods (FMCG) sector still remains the fourth largest sector in the

economy with a total market size in excess of US$13.1 billion. The top 15 FMCG companies clocked sales and profit growth of 23% and 12% respectively for the quarter ended September 2012, compared with the corresponding period for the previous year.
The FMCG sector is set on a rapid growth trajectory with the sector projected to grow by over 60% by 2016. This will translate into an annual growth of 10% over a 5 year period.
Hair care, household care, mail grooming, female hygiene, chocolates, and confectioneries are estimated to be the fastest growing segments, says the report. The report estimates that the total size of the FMCG sector will rise from around ₹56,500 crore in 2011 to ₹92,100 crore in 2016.
While the current year is expected to be excellent for rural income growth and increase of rural buying power, urban demand will be the key growth driver over the long-term, says the report. Long-term urban penetration-led growth categories will outperform other categories and urban spend on new category growth will outpace rural spend. This, the report, says will occur due to rising urban incomes, increasing urban population and launch of more affordable products as well as the availability of new categories in urban area.
Answer the following questions —

(a) What is the present value of non-convertible debenture?
(b) What is the possibility to capture the market in the rural areas?
(c) Analyse the financial performance and the financial position of the company.
(d) An analytical approach is required to find out the growth opportunity in FMCG sector.
(e) Is the intention of the company to raise loan funds to emerge the growth potential of its different products is tenable? Justify on the basis of debt-equity ratio.

[3+3+3+3+3]

Question 3

(a) The annual sales of a company are as follows:

Year	2008-09	2009-10	2010-11	2011-12	2012-13
Sales (₹ in lakhs)	50	65	80	55	75

Find the trend value of each year by using Least Square method and also estimate the sales for the year 2016-17.

(b) How income can be defined from the Accounting point of view?

[7+3]

Question 4

(a) "Financial analysis is the selection, evaluation and interpretation of financial data, along with other pertinent information, to assist in investment and financial decision-making." — specify the sources of financial data and also state the objectives of such analysis towards goal congruence.

(b) Analyse the cash flow statement on the basis of ratio analysis and make the comments on the position and performance of the company.

In the books of Akriti Ltd.
Cash Flow Statement
For the year ended 31st March 2013

Particulars	₹	₹	₹
Cash Flows from operating Profit			
Operating Profit		2,75,000	
Add: Non- operating expenses			

Debenture Interest		20,000	
		2,95,000	
Less: Increase in Working Capital (Other than cash and Cash equivalent = (₹ 2,75,000 – ₹ 2,19,500)		55,500	
		2,39,500	
Less: Income Tax paid		1,39,500	
Net Cash Flow from Operating activities			1,00,000
Cash Flows from Investing activities			
Purchase of Fixed Assets		2,95,000	
Net Cash Flows for Investing Activities			(-) 2,95,000
Cash Flows from Financing activities			
Issue of Shares		85,000	
Less: Redemption of Debentures	1,20,000		
Payment of dividend	24,000		
Interest paid	17,000		
		1,61,000	
Net Cash Flows from Financing activities			(-) 76,000
Net decrease in cash and cash equivalent			(-) 2,71,000
Add: Cash and Cash Equivalent at the beginning			1,95,000
Cash or cash Equivalent at the end			(-)76,000

[3+7]

Question 5

(a) The following informations are given regarding Bhor Ltd. Some key ratios are provided for the particular industry to which Bhor Ltd. belongs. You are required to calculate the relevant ratios for Bhor Ltd., compare them with that particular industry norms and give the comments on the performance of the company.

The following balances are available from the Books of Accounts of Bhor Ltd. as at 31st March, 2013:
Equity Share Capital — ₹27,00,000, 12% Debentures — ₹5,00,000, Sundry Creditors — ₹3,80,000, Bills Payable — ₹3,20,000 and Other Current Liabilities — ₹2,00,000, Net Fixed Assets — ₹17,00,000, Cash — ₹4,00,000, Sundry Debtors — ₹7,50,000 and Stock — ₹12,50,000.
The sales for the company for the year ending 31.03.2013 amounted to ₹60,00,000 and the gross profit was 17,00,000.

Industry Norms	Ratio considered
Current ratio	2.4
Sales/Debtors	7.7
Sales/Stock	7.9
Sales/Total assets	2.39
Gross Profit ratio	36%

(b) Write down the issues related to the expected return on the plan assets in identifying sustainable earnings.

[7+3]

Section B – Business Valuation

(Full Marks: 50)

Answer Question no.6 and 7 and any two from the rest in this section.

6. Mr. Khan stated at the paper in front of him. He has just finished projections for his startup company, Export Dotcom Pvt. Ltd. He was in need of money and intended to use his valuations for this purpose. He was almost convinced that he would be able to influence lenders about the potential of this startup firm in online-export documentation. However, he was not sure about whether the lenders would accept his valuations. He considered the options in front of him.

He considered his projections to be reasonable, although he guessed that he only had a 30% chance of hitting those numbers and an equal 30% chance of achieving half of the projected cash flows. He is also aware that there is a relatively high probability (40%) of not getting any cash flow at all.

In estimating cash flow, Khan thought that he would only need ₹ 5 million in cash to run the business. Anything above ₹ 5 million would be considered as excess cash. Because the firm was just getting off the ground, there was no working capital and no fixed assets at the beginning of 2012. Any working capital and net fixed at the end of year 2012 would be a net investment.

Mr. Khan has made projections for next six years (Exhibit 1) and he thought that after six year the net earnings firm is expected to grow at around 7% per year, although he wondered what a somewhat more modest growth rate of 4% would do to the expected value of the firm.

Mr. Khan thought of approaching venture capitalists too for raising money. He is fully aware that traditional lending institutions are averse to lending in his kinds of business. But he was aware that venture capitalists are always skeptical about any projections made by the prospective borrower and hence he has decided to show only the best case projections to the venture capitalists. He approached one venture capitalist with his cash flow projections and the venture capitalist has flatly said that they would require a 51% rate of return on their investment in his type of firm.

Mr. Khan knew that he would not be taking on any debt for the foreseeable future. However, he was wondering how being an all equity firm would affect his cost of capital. The long term equity risk premium is around 7.5%. However, illiquid stocks carry 100basis point more premium. Current 364-day treasury bills yield 7% on an effective annual rate. Swarup a friend of khan has suggested that Export Dotcom might be able to take on debt later once it has stabilized.

Khan knew that in order to value a startup, he has to gather information on existing pure players or at least comparable firms. He found three publicly traded firms directly comparable to his kind of business (pure players) (Exhibit 2). He wondered how he should use this information in determining value of his firm. The following questions came to his mind:

(a) Should he use beta of these publicity traded firms? What about the fact that he was still private? **[2]**

(b) What is the value os the firm based on discounted cash flows. (Use market value weighted beta of the pure players.) **[10]**

(c) Does venture capital method of valuation give any better insight? (Use average P/E multiple-equally weighted.) **[3]**

Help Mr. Khan find answer to these questions. (Refer Exhibits 1 & 2 given below):

Exhibit 1: Projected Financials (best case) of Exp[ort Dotcom Pvt. Ltd.
(Figs. In ₹ '000s)

	2012	**2013**	**2014**	**2015**	**2016**	**2017**
Income Statement						
Net Sales	42,500	75,000	1,77,500	2,30,000	2,60,000	3,00,000
Cost of goods sold	16,000	28,000	70,000	90,500	1,00,500	1,22,500
Selling and general admn. Exp.	17,500	27,050	32,000	26,500	36,000	39,000
R & D expenses	5,500	12,500	20,500	27,000	32,500	35,000
EBIT	3,500	7,450	55,000	86,000	91,000	1,03,500
Tax (35%)	1,225	2,607.5	19,250	30,100	31,850	36,225
Net earnings	2,275	4,842.5	35,750	55,900	59,150	67,275
Balance Sheet						
Cash	5,000	5,000	23,965	69,535	1,23,495	1,85,210
Accounts receivable	7,085	12,500	29,585	38,335	43,335	50,00
Inventories	2,000	3,500	8,750	11,315	12,565	15,315
Other	1,770	3,125	7,400	9,585	10,835	12,500
Net Fixed Assets	4,530	11,500	16,000	20,000	21,500	22,500
Total Assets	20,385	35,625	85,700	1,48,770	2,11,730	2,85,525
Accounts payable	2,665	4,665	11,665	15,085	16,750	20,415
Accrued expenses	3,035	5,355	12,680	16,430	18,570	21,430
Net worth	14,685	25,605	61,355	1,17,255	1,76,405	2,43,680
Total liabilities and net worth	20,385	35,625	85,700	1,48,770	2,11,725	2,85,525

Exhibit 2: Financial details of pure players for the year 2011
(Figs. In ₹ Lakhs)

	Player 1	**Player 2**	**Player 3**
Net earnings	26.35	108.75	7.5
Debt	35.9	34	0.85
Net worth	60.5	1056	187.8
Equity beta	1.4	1.3	1.2
P/E Ratio	20	37	20

7. Supreme Toy Ltd., a toy manufacturing company, has aggressive plans for expending its market share. To get faster market access the management of the company has decided in favour of takeover. The research wing of Supreme Toy Ltd. has undertaken a detailed study of prospective takeover targets and finally identified Ginger Ltd., a company based in Baroda. Supreme Toy Ltd. has already collected the following relevant information about Ginger Ltd. It is now to assess the value of Ginger's to start negotiation for the takeover.

Balance Sheet of Ginger Ltd. as on 31st March, 2012

(₹ in lakhs)

Liabilities	Amount	Assets	Amount
Share Capital	80	Land	4
Reserves	6	Buildings	40
Term Loan:		Plant and Machinery	100
IDBI	100	Other Fixed Assets	6
Other	20	Gross fixed assets	150
Current Liabilities	300	Less: Accumulated depreciation	64
			86
		Add: Capital WIP	16
		Total Fixed Assets	102
		Inventories	120
		Receivables	160
		Other	124
	506		506

Capital expenditure of ₹ 86 lakhs will be incurred in 2013 and ₹ 280 lakhs in 2014.

Other information:

(₹ in lakhs)

Particulars	2012	2013	2014	2015	2016	2017
Net sales	1,100	1,160	1,600	2,100	2,400	2,500
Raw materials cost	480	500	660	880	940	960
Power	20	23	32	43	44	48
Employee related cost	56	61	80	88	100	110
Administrative expenses	21	24	32	37	39	41
Depreciation	10	14	41	42	42.4	42.8

The tax rate for the company is 30%. There is no change on deferred taxes. The stock is currently trading at ₹ 25 per share. The cost of equity is 20%.

Bank finance carries an interest rate of 20%. Based on the information given use the discounted cash flow approach to value Ginger Ltd.

Note: Additional capital (issued at par) ₹ 260 lakhs
Term loan ₹ 220 lakhs

[15]

8. (a) Briefly discuss reasons for the existence of alpha values and whether or not the same alpha values should be expected to exist in a year's time. **[4]**

(b) Many Pharmaceuticals firms have historically been able to maintain high returns on equity and earn surplus returns. Many have argued that this is due to the protection the patent system offers them against competition. Why would patents lead to higher returns on equity and capital? Assume that a law is passed weakening patent protection against competition. What implications would this law have for the profitability of pharmaceutical firms? In the absence of patent protection, what differential advantages would a pharma firm have over its competitors? **[6]**

9. (a) Soft Solution is a small software firm with high growth rate. It has existing assets in which it has capital invested of ₹ 100 lakh. The other information about Soft Solution is as follows:

The after tax operating income on assets in place is ₹ 15 lakh. This return on capital of 15% is expected to be sustained in the future. Cost of capital of Soft Solution is 10%.

At the beginning of each of the next five years Soft Solution is expected to make new investments of ₹ 10 lakh each. These investments are also expected to earn 15% as a return on capital, and the cost of capital is expected to remain 10%.

After the year 5, Soft Solution will continue to make investments, and earnings will grow 5% a year, but the new investments will have a return on capital of only 10%, which is also the cost of capital.

All assets and investments are expected to have infinite lives. The assets in place and the investments made in the first five years will make 15% a year in perpetuity, with no growth.

Based on the information given estimate the value of Soft Solution, How much of this value comes from the EVA and how much from capital invested? **[5]**

(b) A Company is considering raising ₹ 100 lakh by one of the two alternative methods, viz., 14percent institutional term loan and 13 percent non-convertible debentures. The term loan portion would attract no major incidental cost. The debentures would have to be issued at a discount of 2.5 percent and would involve ₹ 1 lakh as cost of issue.

Advice the Company as to the better option based on the effective cost of capital in each case. Assume tax rate of 35 percent. **[5]**

10. (a) Is hostile takeover legally allowed in India? If yes, what are bases of arriving at the public offer price? Are these bases applicable for acquisition of an unlisted target company? **[5]**

(b) As a 'Financial Analyst' you are analyzing the performance of two companies, a Biotechnology firm and a mobile telephone manufacturer. You have collected the following information about the two companies:

Company	Actual ROE	Beta	ROE of Peer Group	Forecasted ROE
Biotech Firm	20.5%	1.2	16%	22%
Mobile Firm	12.5%	1.4	10%	10.5%

The risk free rate of return is 7%. Evaluate the performance of each of these companies relative to

(i) The required rate of return
(ii) The return on equity of the peer group
(iii) The forecasted return on equity

What conclusions would you draw about the investment choices made by these firms? **[5]**