Paper – 20: Financial Analysis & Business Valuation

Time Allowed: 3 hours **Full Marks: 100**

Group-A

(Answer Question 1 and 2 which are compulsory and any two from the rest)

Question 1.

Visakhapatnam Steel Plant (VSP) is one of the most modern steel plants in the country. In the year 1979, to meet the growing domestic needs of steel, Government of India signed an agreement with erstwhile USSR for cooperation in setting up 3.6 million tons integrated steel plant at Visakhapatnam. The project was estimated to cost ₹ 3,897.28 crores based on prices of-fourth quarter of 1981 but on completion of construction and commissioning of whole plant in 1992, the cost was escalated to around ₹ 8,500 crores. The plant has a capacity of producing 3 million tons of liquid steel and 2.656 million tons of saleable steel. The main products of VSP are angles, billets, channels, beams, squares, flats, rounds rebars, wire rods. The major units in VSP are Coke Ovens, Sinter Plant, Blast Furnace, Steel Melt Shop (SMS), Light and Medium Merchant Mill (LMMM), Wire Rod Mill(WRM), Medium & Structural Mill(MMSM).

The vision of VSP is to become a 10 million tons world class integrated steel plant by 2019-20. Its mission is to be a continuously growing company through technological up gradation, operational efficiency and expansion, producing steel at international standards of cost and quality ensuring optimal return on investment to stakeholders and meeting expectations of the customers. The core values of VSP are commitment, customer satisfaction, continuous improvement, concern for environment.

Constraints faced by VSP

Today, VSP is moving forward with an aura of confidence with pride to enable the company to reach new heights in organizational excellence. But in the earlier days, the plant, in spite of securing a reduction in the interest burden to a large extent through capital restructuring in 1993, could not attain envisaged capacity levels and financial viability. While price of steel was stagnant, high capital cost and large borrowings resulted in huge cost overruns and high capital-related charges. The input costs were high and raw materials prices had gone up. The recession in the steel industry was another cause for depression. It has been exposed to global competition by liberal imports. Apart from all this, in the fear 1998-99, Coke Oven Batteries came to a halt for the production of pig iron and finished steel as well as forcing a lengthy repair schedule. Also, sluggish economy both in domestic and international market led to reduction in sales turnover. Economic crisis in South-East Asian markets led to a large scale dumping of steel from their countries which adversely affected the export performance. The production factor of finished steel had declined in 1998-99 as compared to previous years.

Due to all these constraints faced by VSP, it was written off as the 'sick child of the industry'. The plant's accumulated losses crossed 50% of its capital base. VSP had to report the fact to BIFR (Board for Industrial and Financial Reconstruction) as the accumulated losses were necessitating reportability for potential sickness. In the process, the situation engendered the loose talk of privatization of the plant. VSP was directed to formulate turnaround strategy for long-term financial viability of the plant. VSP had submitted a capital restructuring proposal during July 1993 to Government, which had not been approved. Again, a second capital restructuring

proposal was undertaken in 1998, converting government loans into redeemable preference share capital.

Turnaround Strategies Implemented at VSP

It was time that VSP realized the changed economic and industrial scenario and also that nothing could be expected of cash-strapped Union Government. It needed to pick up the gauntlet to face the rough weather by identifying areas needing improvement and concentrating on-them to lead to progressive results. During 1998-99, the company facilitated the issue of 1% non-cumulative preference shares to Government of India that resulted in the increase of authorized share capital of the company from ₹ 6,500 crores to ₹ 8,000 crores. The interest rates on long-term were reduced. Introducing the corporate cash management scheme through Canara Bank, the company got daily sales collection of major branches on the same day at Head quarters. The company prepaid entire outstanding loan to UTI and part prepayments of term loans from banks through the wealth made out of internal generation through various measures.

The major step taken by VSP is utilizing the element of aggressive treasury management. The company had taken the step of rescheduling of high cost loans with low cost loans by pre-paying loans with higher interest and obtaining softer interest loans from banks. VSP has substituted high cost working capital demand loans with softer interest product like commercial paper. Also VSP secured cheaper lines of credit for import of raw materials.

During 2001-02, savings were achieved by change in mode of shipment of limestone, reduction in price of major purchases achieved by way of negotiation and cash flow was reduced on account of special additional duty. VSP has strived to achieve the best from its internal resources and attain funds through internal generation. The plant has taken innovative steps to operate consistently beyond rated capacities in all the production units. Efficient operation management coupled with optimum waste utilization and improved techno-economic parameters along with cost reduction measures have been the major contributing factors that led to VSP's turnaround.

With regard to techno-economic front, during the period from 1998-99 to 2002-03, the plant has made a significant improvement in the specific energy consumption, specific refractory consumption, average converter life, rolling rate, total coke rate and fuel consumption. Thrust was given for recycling of metallurgical waste and smaller fractions of coke in solid waste and the materials generated in the plant were collected, segregated, used or sold. Initiatives taken to recycle the solid waste and utilizing them led to a saving of raw material consumption.

Another major strategy of VSP that resulted in the turnaround of the company is the cost reduction measures taken in the plant production. Technological improvement schemes, usage of recycled solid wastes, usage of certain inputs in partial replacement with costlier ones, power generation through waste heat, internal recovery of copper for making value-added steel were major cost reduction measures taken. Initiatives were taken to consume freshly generated and accumulated metallurgical wastes. The company had laid emphasis on total involvement by workers participation in management through suggestion schemes, which played a major role in rapid growth of techno-economic parameter and labour productivity.

After reading the above passage, answer the following questions—

(a) What is referred to as Industrial Sickness? Why VSP was called 'sick child of the industry'?

(b) How Government of India was involved in the turnaround policy adopted by VSP?

(c) Generally there are various ways for identification of sick/distress units. State those ways of identification.

(d) Technology had been applied for improvement of production in different ways. What are those areas and how did it become cost effective in VSP?

[4+3+5+3]

Question 2.

Ganga Manufacturing Company is an important producer of lawn furniture and decorative objects for the patio and garden. The last year's Income Statement and Balance Sheet are as follows:

Income Statement (Extract)

Particulars	₹
Sales	75,00,000
Variable Costs	46,90,000
Contribution	28,10,000
Fixed Costs	14,00,000
Earnings before Interest and Tax (EBIT)	14,10,000
Interest	2,00,000
Earnings before Tax (EBT)	12,10,000
Taxation	6,05,000
Net Income after Tax	6,05,000

Balance Sheet (Extract)

Liabilities	₹	Assets	₹
Equity Capital	10,00,000	Fixed Assets	60,00,000
Reserves and Surplus	42,00,000	Inventory	6,00,000
Long-term Debt (10%)	20,00,000	Receivables	7,00,000
Current Liabilities	5,00,000	Cash	4,00,000
	77,00,000		77,00,000

Figures for industry comparison:
Normal Asset Turnover 1.2: 1
Normal Profit Margin 20%.

For the Current Year, the forecasted sales are ₹ 80,00,000 and it is likely that variable costs will remain at approximately the same percentage of sales as was in the last year (Figures could be rounded off). Fixed costs will rise by 10%.

Ganga has short listed the following two product lines to be sold through its existing distribution channels:

(1) Production and Sale of metal table and chair unit that will be sold for issue around swimming pools. This will require an investment of ₹20,00,000, which would involve installation of manufacturing and packaging machinery. Sales forecast are ₹15,00,000 per annum, variable costs account for 2/3rds of sales value, fixed costs are ₹2,00,000 and no additional working capital is needed.

(2) Hardwood Planter, with three separate components, will be appropriate for medium-sized shrubs. This will require an investment of ₹30,00,000 with forecasted sales per

annum of ₹25,00,000, variable costs 64% of sales value and fixed costs of ₹5,00,000.

Two Financial Plans are available:

(a) It could borrow on a 10-year note at 9 per cent for either or both of the projects of an amount not to exceed ₹60,00,000.

(b) Cumulative Preference shares with a 10 per cent dividend upto an amount of ₹ 30,00,000. Financing through the issue of equity shares would not be possible at the present time.

You are required to answer the following questions:

(1) Without the new proposals, what would be the company's operating, Fixed charges and Combined leverages next year? Would the company have favourable financial leverage? Also calculate profit margin and assets leverage or capital turnover.

(2) How does the acceptance of each project affect the differing leverages including asset leverages?

(3) With each financing alternatives, do the company's future earnings per share increase or decrease. Why?

[6+6+3]

Question 3.

(a) From the following balance sheet prepare common size statement and comment on it.

	Amount (₹) 31.03.2012	Amount (₹) 31.03.2013
Equity share capital (of ₹10 each)	7,00,000	7,50,000
Reserve & Surplus	3,00,000	5,00,000
Long term debt	5,00,000	4,50,000
Current Liabilities	3,00,000	2,00,000
Total	18,00,000	19,00,000
Fixed Assets	12,00,000	11,50,000
Inventory	3,00,000	3,50,000
Debtors	2,00,000	2,50,000
Bank	1,00,000	1,50,000
Total	18,00,000	19,00,000

(b) What are the areas in corporate sector can be the indicators of its distress analysis?

(c) "A syndicated bank loan is one in which a group (or syndicate) of banks provides funds to the borrower." — Clarify it.

[5+3+2]

Question 4.

Following is the summarized Balance Sheet of Paro Trading Corporation Ltd. as at 31st Mar. 2013:

6% Pref. Share Capital - ₹1,50,000

Equity Share capital – ₹2,50,000
General reserve – ₹20,000
Profit and Loss Account – ₹15,000
5% Debentures – ₹1,00,000
Sundry Creditors – ₹12,000
Bills payable – ₹28,000

Good will – ₹20,000
Land and Building – ₹2,50,000
Machinery – ₹1,75,000
Furniture – ₹10,000
Stock – ₹90,000
Sundry debtors – ₹21,000
Cash at bank – ₹5,000
Preliminary Expenses – ₹4,000

Other Information:
Total Sales ₹4,00,000; 20% of which is made on credit. Gross Profit and net Profit (after tax) for the year amounted to ₹80,000 and ₹20,000, respectively.
Comment on the financial conditions of the business.

[10]

Question 5.

(a) Following figures have been extracted from the records of a company:

Year	2011-12	2012-13
Sales (₹)	12,00,000	16,80,000
Cost of Goods Sold (₹)	8,00,000	12,60,000
Units Sold	40,000	60,000

Account for changes in profit due to changes in sales quantity, cost price and selling price.

(b) Rowdy Company's equity shares are being traded in the market at ₹54 per share with a price- earnings ratio of 9. The Company's dividend payout is 75%. It has 1,00,000 equity shares of ₹10 each and no preference shares. Book value per share is ₹47.

Calculate: (i) Earnings per share, (ii) net income, (iii) Dividend yield, and (iv) return on equity.

(c) "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.

[4+4+2]

Section B – Business Valuation

(Full Marks: 50)

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

Question 6.

The Directors of Orient Paper & Industries Ltd is planning to sell the Company. For this purpose they want you to put a value on the equity share of the Company using the methods which a prospective purchaser might apply.

The following information should be considered in valuing the shares under each method, commenting briefly on each method adopted –

I. Balance Sheet as on 31st March 2013

Liabilities	₹	Assets	₹
20,000 Equity Shares of ₹10 each fully paid	2,00,000	Fixed Assets - Net Block	
Revenue Reserves	5,95,000	Land & Building	5,00,000
Secured Loan (Secured on Land & Building)	1,50,000	Plant & Machinery	2,75,000
Trade & Expense Creditors	1,35,000	Motor Vehicles	55,000
Provision for Taxation	45,000	Stock in Trade	1,33,000
		Sundry Debtors	1,45,000
		Cash at Bank	15,000
		Preliminary Expenses	2,000
	11,25,000		11,25,000

II. Profit/ Dividend record: The Profit record after tax and interest but before dividends over the last five years has been as follows:

Year	2009	2010	2011	2012	2013
Profit	₹ 80,000	₹ 75,000	₹ 95,000	₹ 80,000	₹ 85,000

The average dividend has been ₹30,000 (gross) for the last ten years.

III. The operating budget shows that estimated after tax profit for the next year will be ₹85,000 and thereafter it is estimated that this will increase by 5% p.a. over the next four years.

IV. In the light of recent developments in the field of financial reporting, the Company has had its Fixed Assets valued by an independent expert whose report discloses the following values – Land & Building - ₹6,10,000, Plant & Machinery- ₹2,88,000, Motor Vehicles - ₹1,02,000.

V. A study of three public companies in the same market as Orient Paper & Industries Ltd shows that the average dividend yield and price earning ratio of these over last three years have been ----

Year	J. K. Paper Ltd		Ballarpur Industries Ltd		Century Pulp & Paper Ltd	
	Dividend Yield %	P/E Ratio	Dividend Yield %	P/E Ratio	Dividend Yield %	P/E Ratio
2011	17.00	8.00	17.00	8.50	16.50	9.00
2012	17.00	8.00	15.00	9.00	17.00	10.00
2013	17.00	9.00	18.00	10.00	17.50	11.50
Average	17.00	8.33	16.70	9.17	17.00	10.17

VI. One of the Directors has indicated that after tax cost of capital is now 17½% . The estimated net cash flow of the Company after taking into consideration taxation and capital expenditure over next five years in order to achieve / and as a result of, the five years profit plan, are as follows:

Year	2014	2015	2016	2017	2018
CF (₹)	1,00,000	1,20,000	1,40,000	10,000	1,50,000

Another Director is of the view that profitability be measured at 12 ½% on Tangible Capital and 17 ½% on Intangible Capital. **[15]**

Question 7.

BA Ltd. and DA Ltd. both the companies operate in the same industry. The Financial statements of both the companies for the current financial year are as follows:

Balance Sheet

Particulars	BA Ltd. (₹)	DA Ltd. (₹)
Current Assets	14,00,000	10,00,000
Fixed Assets (Net)	10,00,000	5,00,000
Total (₹)	**24,00,000**	**15,00,000**
Equity capital (₹10 each)	10,00,000	8,00,000
Retained earning	2,00,000	-
14% long – term debt	5,00,000	3,00,000
Current liabilities	7,00,000	4,00,000
Total (₹)	**24,00,000**	**15,00,000**

Income Statement

Particulars	BA Ltd. (₹)	DA Ltd. (₹)
Net Sales	34,50,000	17,00,000
Cost of Goods sold	27,60,000	13,60,000
Gross Profit	6,90,000	3,40,000
Operating expenses	2,00,000	1,00,000
Interest	70,000	42,000

Earning before taxes	4,20,000	1,98,000
Taxes @5%	2,10,000	99,000
Earning after taxes (EAT)	**2,10,000**	**99,000**
Additional Information:		
No. of Equity shares	1,00,000	80,000
Dividend payment ratio (D/P)	40%	60%
Market price per share	₹40	₹15

Assume that both companies are in the process of negotiating a merger through an exchange of equity shares. You have been asked to assist in establishing equitable exchange terms and are required to:

I. Decompose the share price of both the companies into EPS and PIE components; and also segregate their EPS figures into Return on Equity (ROE) and book value/intrinsic value per share components.

II. Estimate future EPS growth rates for each company.

III. Based on expected operating synergies BA Ltd. estimates that the intrinsic value of DA's equity share would be f 20 per share on its acquisition. You are required to develop a range of justifiable equity share exchange ratios that can be offered by BA Ltd. to the shareholders of DA Ltd. Based on your analysis in part (i) and (ii), would you expect the negotiated terms to be closer to the upper, or the lower exchange ratio limits and why?

IV. Calculate the post-merger EPS based on an exchange ratio of 0.4:1 being offered by BA Ltd. Indicate the immediate EPS accretion or dilution, if any, that will occur for each group of shareholders.

V. Based on a 0.4:1 exchange ratio and assuming that BA Ltd's pre -merger P/E ratio will continue after the merger, estimate the post- merger market price. Also show the resulting accretion or dilution in pre-merger market prices. **[15]**

Question 8.

(a) What are the different methods of valuing self-generated brands?

(b) Explain how it is possible for sales growth to decrease the value of a profitable company.

[6+4]

Question 9.

(a) In finance theory, it is often assumed that stock markets in the USA and the UK are semi-strong form efficient. Explain this assumption and its implications for financial managers.

(b) Ronix Computers has a well-earned reputation for earning a high return on capital. The firm had a return on capital of 100%, on capital invested of ₹1,500 crore, in 2008-09.

Assume that you have estimated the value of the research asset to be ₹1,000 crore. In addition, the R&D expense this year is ₹250 crore, and the amortization of the research asset is ₹150 crore.

Required:

Re-estimate Ronix Computer's return on capital. **[6+4]**

Question 10.

(a) You have been provided the following financial data pertaining to RITZ LTD, an Engineering company.

Year ended March 31	2012	2011	2010
Profit before Interest and Tax (₹ million)	3396	2310	1785
Non-branded Income (₹ million)	335	125	112
Inflation factor	1.000	1.064	1.132
Weightage factor	3	2	1
Average Capital Employed (ACE) (₹ million)	6550		
Remuneration to Capital (8% of Avg. Capital employed)	8%		
Corporate Tax rate	35%		
Brand Multiple Applied	23.20		

You are required to calculate the BRAND VALUATION of RITZ LTD.

(b) Discuss various aspects of, computation of Economic Value Added and application in business planning and valuation. **[7+3]**