FINAL
GROUP-I **PAPER-2**
STRATEGIC FINANCIAL
MANAGEMENT

Roll No. ....

NOV 2011

Total No. of Questions – **7**

Total No. of Printed Pages – **8**

Time Allowed – **3** Hours

Maximum Marks – **100**

JAC

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi medium, his answers in Hindi will not be valued.

Question No. **1** is compulsory.

Answer any **five** questions from the remaining **six** questions.

Working notes should form part of the answer.

Marks

1. (a) Orange purchased 200 units of Oxygen Mutual Fund at ₹ 45 per unit on 31st December, 2009. In 2010, he received ₹ 1.00 as dividend per unit and a capital gains distribution of ₹ 2 per unit. **5**

Required :

(i) Calculate the return for the period of one year assuming that the NAV as on 31st December 2010 was ₹ 48 per unit.

(ii) Calculate the return for the period of one year assuming that the NAV as on 31st December 2010 was ₹ 48 per unit and all dividends and capital gains distributions have been reinvested at an average price of ₹ 46.00 per unit.

Ignore taxation.

(b) An importer is due to pay the exporter on 28th January 2010, Singapore Dollars of 25,00,000 under an irrevocable letter of credit. It directed the bank to pay the amount on the due date. **5**

Due to go-slow and strike procedures adopted by its staff, the bank was not in a position to remit the amount due. The amount was actually remitted on 4th February 2010.

On the transaction, the bank wants to retain an exchange margin of 0.125 per cent.

Marks

The following were the rates prevalent in the exchange market on the relevant dates :

	28th January	4th February
Rupee/US $1	₹ 45.85 / 45.90	₹ 45.91 / 45.97
London Pound/Dollars	$ 1.7840 / 1.7850	$ 1.7765 / 1.7775
Pound	Sing $ 3.1575 / 3.1590	Sing $ 3.1380 / 3.1390

What is the effect on account of the delay in remittance ? Calculate rate in multiples of .0001.

(c) A company has a book value per share of ₹ 137.80. Its return on equity is 15% and follows a policy of retaining 60 percent of its annual earnings. If the opportunity cost of capital is 18 percent, what is the price of its share ? [adopt the perpetual growth model to arrive at your solution]. 5

(d) The six months forward price of a security is ₹ 208.18. The rate of borrowing is 8 percent per annum payable at monthly rates. What will be the spot price ? 5

2. (a) Using the chop-shop approach (or Break-up value approach), assign a value for Cranberry Ltd. whose stock is currently trading at a total market price of €4 million. For Cranberry Ltd, the accounting data set forth three business segments : consumer wholesale, retail and general centers. Data for the firm's three segments are as follows : 8

Business Segment	**Segment Sales**	**Segment Assets**	**Segment Operating Income**
Wholesale	€ 225,000	€ 600,000	€ 75,000
Retail	€ 720,000	€ 500,000	€ 150,000
General	€ 2,500,000	€ 4,000,000	€ 700,000

Industry data for "pure-play" firms have been compiled and are summarized as follows :

Business Segment	**Capitalization/ Sales**	**Capitalization/ Assets**	**Capitalization/ Operating Income**
Wholesale	0.85	0.7	9
Retail	1.2	0.7	8
General	0.8	0.7	4

Marks

(b) Nitrogen Ltd, a UK company is in the process of negotiating an order amounting to €4 million with a large German retailer on 6 months credit. If successful, this will be the first time that Nitrogen Ltd has exported goods into the highly competitive German market. The following three alternatives are being considered for managing the transaction risk before the order is finalized.

(i) Invoice the German firm in Sterling using the current exchange rate to calculate the invoice amount.

(ii) Alternative of invoicing the German firm in € and using a forward foreign exchange contract to hedge the transaction risk.

(iii) Invoice the German first in € and use sufficient 6 months sterling future contracts (to the nearly whole number) to hedge the transaction risk.

Following data is available :

Spot Rate	€1.1750 - €1.1770/£
6 months forward premium	0.60-0.55 Euro Cents
6 months further contract is currently trading at	€1.1760/£
6 months future contract size is	£ 62500
Spot rate and 6 months future rate	€1.1785/£

Required :

(a) Calculate to the nearest £ the receipt for Nitrogen Ltd, under each of the three proposals. 4

(b) In your opinion, which alternative would you consider to be the most appropriate and the reason therefor. 4

Marks

3. (a) Helium Ltd has evolved a new sales strategy for the next 4 years. The following information is given : 10

Income Statement	₹ in thousands
Sales	40,000
Gross Margin at 30%	12,000
Accounting, administration and distribution expense at 15%	6,000
Profit before tax	6,000
Tax at 30%	1,800
Profit after tax	4,200

Balance sheet information	
Fixed Assets	10,000
Current Assets	6,000
Equity	15,000

As per the new strategy, sales will grow at 30 percent per year for the next four years. The gross margin ratio will increase to 35 percent. The Assets turnover ratio and income tax rate will remain unchanged.

Depreciation is to be at 15 percent on the value of the net fixed assets at the beginning of the year.

Company's target rate of return is 14%.

Determine if the strategy is financially viable giving detailed workings.

(b) Pineapple Ltd has issued fully convertible 12 percent debentures of ₹ 5,000 face value, convertible into 10 equity shares. The current market price of the debentures is ₹ 5,400. The present market price of equity shares is ₹ 430.

Calculate :

(i) the conversion percentage premium, and 3

(ii) the conversion value 3

Marks

4. (a) Based on the credit rating of the bonds, A has decided to apply the following discount rates for valuing bonds : **8**

Credit rating	**Discount rate**
AAA	364-day T-bill rate + 3% spread
AA	AAA + 2% spread
A	AAA + 3% spread

He is considering to invest in a AA rated ₹ 1,000 face value bond currently selling at ₹ 1,025.86. The bond has five years to maturity and the coupon rate on the bond is 15 percent per annum payable annually. The next interest payment is due one year from today and the bond is redeemable at par. (Assume the 364-day T-bill rate to be 9 percent).

You are required to :

(i) Calculate the intrinsic value of the bond for A. Should he invest in the bond ?

(ii) Calculate the Current Yield (CY) and the Yield to Maturity (YTM) of the bond.

(b) XYZ Ltd. is considering to acquire an additional computer to supplement its time-share computer services to its clients. It has two options : **8**

(i) To purchase the computer for ₹ 22,00,000

(ii) To lease the computer for three years from a leasing company for ₹ 5,00,000 as annual lease rent plus 10 percent of gross time-share service revenue. The agreement also requires an additional payment of ₹ 6,00,000 at the end of the third year. Lease rent is payable at the year end, and the computer reverts to the lessor after the contract period.

The company estimates that the computer under review now will be worth ₹10,00,000 at the end of third year. Forecast revenues are :

Year	**₹**
1	22,50,000
2	25,00,000
3	27,50,000

Annual operating costs (excluding depreciation/lease rent of computer) are estimated at ₹ 9,00,000 with an additional ₹ 1,00,000 for start-up and training cost at the beginning of the first year. These costs are to be borne by the lessee. XYZ Ltd. will borrow at 16% interest to finance acquisition of computer; repayments are to be made according to the following schedule :

Year-end	Principal (₹)	Interest (₹)	Total (₹)
1	5,00,000	3,52,000	8,52,000
2	8,50,000	2,72,000	11,22,000
3	8,50,000	1,36,000	9,86,000

The company uses straight line method to depreciate its assets and pays 50 percent tax on its income.

The management of XYZ Ltd. approaches you for advice. Which alternative would you recommend and why ?

5. (a) The following is the Balance-sheet of Grape Fruit Company Ltd as at March 31^{st}, 2011.

Liabilities	(₹ in lakhs)	Assets	(₹ in lakhs)
Equity shares of ₹ 100 each	600	Land and Building	200
14% preference shares of ₹ 100/- each	200	Plant and Machinery	300
13% Debentures	200	Furniture and Fixtures	50
Debenture interest accrued and payable	26	Inventory	150
Loan from bank	74	Sundry debtors	70
Trade creditors	340	Cash at bank	130
		Preliminary expenses	10
		Cost of issue of debentures	5
		Profit and Loss Account	525
	1440		**1440**

The Company did not perform well and has suffered sizable losses during the last few years. However, it is felt that the company could be nursed back to health by proper financial restructuring. Consequently the following scheme of reconstruction has been drawn up :

(i) Equity shares are to be reduced to ₹ 25/- per share, fully paid up;

(ii) Preference shares are to be reduced (with coupon rate of 10%) to equal number of shares of ₹ 50 each, fully paid up.

(iii) Debenture holders have agreed to forgo the accrued interest due to them. In the future, the rate of interest on debentures is to be reduced to 9 percent.

(iv) Trade creditors will forego 25 percent of the amount due to them.

(v) The company issues 6 lakh of equity shares at ₹ 25 each and the entire sum was to be paid on application. The entire amount was fully subscribed by promoters.

(vi) Land and Building was to be revalued at ₹ 450 lakhs, Plant and Machinery was to be written down by ₹ 120 lakhs and a provision of ₹ 15 lakhs had to be made for bad and doubtful debts.

Required :

(i) Show the impact of financial restructuring on the company's activities. **6**

(ii) Prepare the fresh balance sheet after the reconstruction is completed on the basis of the above proposals. **4**

(b) An Indian importer has to settle an import bill for \$ 1,30,000. The exporter has given the Indian exporter two options : **6**

(i) Pay immediately without any interest charges.

(ii) Pay after three months with interest at 5 percent per annum.

The importer's bank charges 15 percent per annum on overdrafts. The exchange rates in the market are as follows :

Spot rate (₹ /\$) : 48.35 / 48.36

3-Months forward rate (₹ /\$) : 48.81 / 48.83

The importer seeks your advice. Give your advice.

Marks

6. (a) A Portfolio Manager (PM) has the following four stocks in his portfolio : 8

Security	No. of Shares	Market Price Per Share (₹)	β
VSL	10,000	50	0.9
CSL	5,000	20	1.0
SML	8,000	25	1.5
APL	2,000	200	1.2

Compute the following :

(i) Portfolio beta.

(ii) If the PM seeks to reduce the beta to 0.8, how much risk free investment should he bring in ?

(iii) If the PM seeks to increase the beta to 1.2, how much risk free investment should he bring in ?

(b) ABC established the following spread on the Delta Corporation's stock : 8

(i) Purchased one 3-month call option with a premium of ₹ 30 and an exercise price of ₹ 550.

(ii) Purchased one 3-month put option with a premium of ₹ 5 and an exercise price of ₹ 450.

The current price of Delta Corporation's stock is ₹ 500. Determine ABC's profit or loss if the price of Delta Corporation's stock.

(a) stays at ₹ 500 after 3 months.

(b) falls to ₹ 350 after 3 months.

(c) rises to ₹ 600.

7. Write short notes on any **four** of the followings : $4 \times 4 = 16$

(a) Capital Rationing

(b) Embedded derivatives

(c) Depository participant

(d) Money market mutual fund

(e) Leading and lagging

(f) Take over by reverse bid
