THE INSTITUTE OF CHARTERED ACCOUNTANTS OF PAKISTAN

Final Examinations Summer 2008

June 4, 2008

BUSINESS FINANCE DECISIONS

(MARKS 100)
(3 hours)

Q.1 Mr. Faraz, a large investor, wants to invest Rs. 100 million in the stock market by developing a portfolio consisting of those shares which have a track record of good performance.

He contacted a Stock Analyst to identify such stocks. After a detailed study, the Stock Analyst recommended investments in shares of five different companies. Based on his recommendation, Mr. Faraz invested the amount on January 1, 2008. The relevant details are as follows:

Company	Investment (Rs.)	Price per Share on Jan 1, 2008 (Rs.)	Expected Dividend Yield	Standard Deviation	Covariance with KSE 100
A	15,000,000	60	3.50%	24%	2.10%
B	18,000,000	245	3.00%	22%	3.00%
C	22,000,000	225	2.50%	18%	2.60%
D	25,000,000	130	8.00%	15%	1.90%
E	20,000,000	210	5.00%	20%	2.80%

The stock analyst also informed him that the standard deviation and market return of the KSE-100 Index is 15% and 20% respectively. The risk free rate of return is 8%.

Required:

(a) Assuming that Mr. Faraz estimates his cost of equity by using the Capital Asset Pricing Model, compute the required rate of return on each security.

(b) As at December 31, 2008, compute the following:
- Estimated value of portfolio.
- Portfolio beta.
- Estimated total return on portfolio. **(18)**

Q.2 The Share Capital and Term Finance Certificates (TFCs) of Faiz Limited (FL) are listed on the Karachi Stock Exchange. An extract from the company's latest balance sheet as on December 31, 2007 is as follows:

	Rs. in million
Ordinary share capital of Rs. 10 each	400
Revenue reserves	350
Other reserves	150
	900
6% TFCs of Rs. 100 each	595
Short term loan – At KIBOR + 3%	80
Total debt and equity	1,575

6 years TFCs were issued on January 1, 2007. The coupon rate is 6% payable annually and the expected IRR is 10%. These TFCs were issued to fund a medium term project. The prevailing commercial rate for similar risk bonds is KIBOR plus 2%. The accounting policy of the company states that TFCs and other Held to Maturity Liabilities are carried at the amortized cost.

KIBOR is currently 9% which can be considered as risk free. FL has an equity beta value of 1.6 with market equity premium of 6.25%. The rate of income tax is 35%.

The dividend paid in the year 2007 was 12.5% and current year's dividend will be paid shortly. The dividend is expected to grow at a constant rate of 10%.

Required:
Compute the following as on December 31, 2007:
(a) Market price of Faiz Limited's Equity Shares and TFCs; and
(b) Weighted Average Cost of Capital. **(12)**

Q.3 Jalib Limited (JL) is planning to invest in a project which would require an initial investment of Rs. 399 million. The project would have a positive net present value of Rs. 60 million if funded only from equity. There are no internal funds available for this investment and the company wants to finance the project through debt. However, JL's existing TFCs contain a covenant that at any point in time, the debt to equity ratio in terms of Market Values should not exceed 1:1.

Currently, the market values of JL's equity (40 million shares are outstanding) and debt are Rs. 672 million and Rs. 599 million respectively. Markets can be assumed to be strong form efficient.

Required:
(a) Using Modigliani & Miller theory relating to capital structure, calculate the minimum amount of equity that the company will have to issue to comply with the TFCs' covenant.
(b) Advise the Board of Directors as regards the following:
- the right share ratio and the price at which right shares may be issued to raise the amount of equity as determined in (a) above, without affecting the market price of shares.
- What would be the impact on the market price of the company's shares if the required amount of equity is arranged by issue of shares at Rs. 14 per share? **(15)**

(Round off all the amounts to nearest millions and price computations to two decimal places)

Q.4 Mohani Limited (ML) has decided to acquire an additional machine to augment its production. The cost of the machine is Rs. 3,200,000 and the expected useful life of the machine is 5 years. The salvage value at the end of its useful life is estimated at Rs. 400,000.

To finance the cost of machine, the company is considering the following options:

(A) Enter into a leasing arrangement on the following terms:

Lease term	5 years
Security deposits	10% of the cost of machine
Insurance costs	payable by lessor
Installment	Rs. 860,000 payable annually at the beginning of the year.
Purchase Bargain Option	At the end of lease term against security deposit.

(B) Obtain a 5 year bank loan at an interest of 11% per annum. The loan including interest would be repayable in 5 equal annual installments to be paid at the end of each year.

The company plans to depreciate the machine using straight-line method. The insurance premium is Rs. 96,000 per annum. The corporate tax rate is 35%. For the purpose of taxation, allowable initial and normal depreciation is 50% and 10% respectively under the reducing balance method. The weighted average cost of capital is 14%.

Required:
Which of the two methods would you recommend to the management? Show all relevant calculations. **(18)**

Q.5 Hali Ltd. (HL) is listed on the stock exchange of Country X and has its operations in Country X and Country Y. The functional currency of both the countries is Rupee (Rs.). In the latest balance sheet of the company, net assets were represented by the following:

	Rupees in million
Ordinary share capital of Rs. 10 each	50
Retained earnings	170
	220
10% Debentures	30
10% Long term loans	40
	290

The current market price of ordinary shares and debentures are Rs. 90 per share and Rs. 130 per certificate respectively. In view of various legal and taxation issues, HL is considering a demerger scheme whereby two different companies, HX and HY will be formed. Each company would handle the operations of the respective country. Mr. Bader, a director of HL, has proposed the following demerger scheme:

(i) The existing equity would be split equally between HX and HY. New ordinary shares would be issued to replace the existing shares.
(ii) The debentures which are redeemable at par value of Rs. 100 in 2012, would be transferred to HX as these were issued in Country X.
(iii) The long term loan was obtained in Country Y and will be taken over by HY.

Demerger would require a one time cost of Rs. 17 million in year one, which would be split between the two companies equally. The finance director has submitted the following projections in respect of the demerged companies:

	HX			**HY**		
	Year 1	**Year 2**	**Year 3**	**Year 1**	**Year 2**	**Year 3**
	-------------------Rupees in million -------------------					
Profit before tax and depreciation	39	42	44	26	34	36
Depreciation	12	11	13	9	10	11

The projections for year 3 are expected to continue till perpetuity.

Accounting depreciation is equivalent to tax depreciation and therefore it is allowable for tax purposes. HX and HY will be subject to corporate tax at the rate of 30% and 25% respectively. Over the next few years, the rate of inflation in Country X and Country Y is expected to be 5% and 7% respectively.

Required:
Assuming your name is XYZ and HL’s weighted average cost of capital is 18%, prepare a brief report for the Board of Directors discussing:
(a) the feasibility of the demerger scheme for the equity shareholders of Hali Limited, based on discounted cash flow technique. Your answer should be supported by all necessary workings.
(b) the additional information and analysis which could assist the Board of Directors in the process of decision making. **(20)**

Q.6 Momin Industries Limited (MIL) is engaged in the business of export of superior quality basmati rice to USA and EU countries. On May 15, 2008, MIL negotiated an order from TLI Inc. (TLI), a USA based company, for the supply of 10,000 tons of rice at the rate of US$ 2,000 per ton. Immediately after acceptance of the order by MIL, the Government imposed a ban on the export of rice. In view of the long standing relationship, MIL has offered to supply rice through Thailand which has been accepted by TLI. After due consultation with the Thai Company, MIL and TLI agreed to the following terms and conditions on May 31, 2008:

- The quantity and price per ton will remain unchanged.
- First consignment of 4,000 tons will be shipped in the last week of June 2008 and the balance will be shipped during the last week of July 2008.
- Shipment will be made directly to TLI.
- TLI will make payment to MIL after one month of shipment.

It was agreed with the Thai Company that MIL shall make the payment on shipment, at the rate of Thai Bhat 50,000 per ton.

MIL has a policy to hedge all foreign currency transactions in excess of Rs. 25 million by obtaining forward cover. MIL's bank has arranged the forward cover and advised the following exchange rates on May 31, 2008:

	Thai Bhat		**US $**	
	Buy	**Sell**	**Buy**	**Sell**
Spot	Rs. 2.33	Rs. 2.36	Rs. 65.12	Rs. 65.24
1 month forward	Rs. 2.30	Rs. 2.33	Rs. 65.45	Rs. 65.57
2 months forward	Rs. 2.28	Rs. 2.31	Rs. 65.77	Rs. 65.89
3 months forward	Rs. 2.26	Rs. 2.29	Rs. 66.10	Rs. 66.22

The bank charges a commission of 0.01% on each transaction.

Required:
Calculate the profit or loss on the above transaction under each of the following options:

(a) the shipments are made according to the agreed schedule;

(b) on July 31, 2008, the parties agree to delay the second shipment for a period of two months. The rates expected to prevail on July 31, 2008 are as follows:

	Thai Bhat		**US$**	
Spot – July 31, 2008	Rs. 2.29	Rs. 2.32	Rs. 65.61	Rs. 65.73
1 months forward	Rs. 2.27	Rs. 2.30	Rs. 65.84	Rs. 65.96
2 months forward	Rs. 2.25	Rs. 2.28	Rs. 66.16	Rs. 66.28
3 months forward	Rs. 2.23	Rs. 2.26	Rs. 66.38	Rs. 66.50

(c) the second shipment is cancelled on July 31, 2008. The exchange rates are expected to be the same as in (b) above. **(17)**

(THE END)