Final Examinations Winter 2008

December 3, 2008

## BUSINESS FINANCE DECISIONS

Q. 1 Shoaib Investment Company Limited is a listed company having a share capital of Rs. 1,000 million consisting of 100 million shares of Rs. 10 each. It's net equity at book value, as of March 31, 2008 was Rs. 2,000 million. The company maintains a debt equity ratio of 70:30 based on market value. Long term debt constitutes $90 \%$ of total liabilities of the company. It is the policy of the company to invest $60 \%$ of its total assets in listed securities. The correlation between the market value of these listed securities held by the company and KSE-100 Index is 1.1 . On March 31, 2008, the company's shares were traded at price to book value ratio ( $\mathrm{P} / \mathrm{B}$ ratio) of 1.4.

During the quarter April 1, 2008 to June 30, 2008, KSE-100 Index fell by 20\%. This fall in Index also affected the market price of the company's shares and as of June 30, 2008, they were being traded at $\mathrm{P} / \mathrm{B}$ ratio of 0.9 . There was no significant change in the amount of liabilities and other assets of the company, during the quarter.

## Required:

(a) Compute the amount of fresh equity required to be injected as of June 30, 2008 in order to maintain the debt equity ratio.
(b) The company has been approached by Mr. Alam, a large investor, who has offered to provide the required capital as computed in (a) above at a discount of $10 \%$ of market value. Compute the \% holding of Mr. Alam in the company, if his proposal is accepted.
Q. 2 Waseem Limited is engaged in manufacture and sale of consumer products. It's management is in the process of developing the sales plan for the next year. The Sales Director is of the view that the main hurdle in increasing the sales is the availability of finance.

The summarized Balance Sheet as of November 30, 2008 is shown below:

|  | Rs. in million |
| :---: | :---: |
| ASSETS |  |
| Fixed assets | 950 |
| Current assets | 730 |
|  | 1,680 |
| LIABILITIES AND EQUITIES |  |
| Ordinary share capital | 250 |
| Retained earnings | 450 |
|  | 700 |
| Long term debts | 465 |
| Current liabilities | 515 |
|  | 1,680 |

Following additional information is available:
(i) It has been established from the company's past record that any increase in sales require an investment of $140 \%$ of the additional sales amount, in inventories and accounts receivable. Further, the accounts payable of the company also increase by $25 \%$ of the additional sales amount.
(ii) The current sales of the company is Rs. 1,100 million while the net profit after tax is $10 \%$ of sales.
(iii) It is the policy of the company to distribute $20 \%$ of its profit after tax among the shareholders of the company.

## Required:

Assuming that you are the Chief Financial Officer of the company, advise the management on the following:
(a) How much additional finance would be required to achieve $20 \%$ increase in sales in the next year?
(b) What would be the maximum growth in sales that the company can achieve if:

- external finances are not available?
- the additional financing is limited to an amount which will maintain the existing debt equity ratio?
Q. 3 Imran Limited wants to borrow Rs. 70 million for two years with interest payable at six monthly intervals. Due to recent hike in inflation, the company expects that the rate of interest is likely to rise over the next 2 years. The company can borrow this amount from a local bank at a floating rate of KIBOR plus $2 \%$ but wants to explore the use of swap to protect it from any interest rate increase, during the next two years.

Another bank has offered the company that it will be willing to receive a fixed rate of $11 \%$ in exchange for payments of six month KIBOR.

## Required:

(a) Calculate the six monthly interest payments if the swap arrangement is in place.
(b) Calculate the net amount receivable/payable by each party to the swap at the end of the first 6 months if:

- KIBOR is $13.5 \%$.
- KIBOR is 9\%.
Q. 4 Hafeez Ltd is planning to bid for a contract to supply a machine under an operating lease arrangement, for 5 years. The terms of proposed contract include a special arrangement whereby the supplier / lessor will have to operate and maintain the machine, during the term of lease. Hafeez Ltd is required to quote a consolidated annual fee consisting of lease rentals and operating changes which shall be payable in arrears. The following relevant information is available:
(i) The cost of machine is Rs. 50 million and the expected useful life is 10 years. The residual value at the end of five years is estimated to be $25 \%$ of the cost of machine.
(ii) Operating cost for the first year is estimated at Rs. 6 million and is expected to increase at the rate of $10 \%$ per annum.
(iii) The tax rate applicable to the company is $35 \%$ and the tax is payable in the same year. The company can claim initial and normal depreciation at $25 \%$ and $10 \%$ respectively under the reducing balance method.
(iv) The weighted average cost of capital of the company is $14 \%$.


## Required:

(a) Calculate the annual consolidated fee to be quoted for the contract if the company's target is to achieve a Pre-tax Net Present Value of $15 \%$ of total capital outlay.
(b) Using the fee quoted above, calculate the project's internal rate of return (IRR) to the nearest percent.
Q. 5 Zaheer Ltd is a manufacturer of auto parts and is currently operating at below capacity due to slump in the demand for automobiles. The company has received a proposal from a truck assembler for supply of 40,000 gear boxes per annum for five years at Rs. 1,900 per gear box .

The cost of each gear box is as follows:

|  | Rupees |
| :--- | ---: |
| Material costs | 800 |
| Labour costs | 500 |
| Variable production overheads | 150 |
| Variable selling overheads | 200 |
| Fixed overheads (allocated) | 150 |
|  | 1,800 |

Company has already incurred a cost of Rs. 5 million on the preparation of technical feasibility. The additional cost for setting up the facility for this order would be Rs. 20 million.

The company maintains a debt equity ratio of 60:40. Cost of debt and cost of equity of the company is $16 \%$ and $19 \%$ respectively. The rate of tax applicable to the company is $30 \%$.

## Required:

(a) Evaluate whether the proposal is financially feasible for the company. Assume that revenue and cost of gear box will remain the same during the next five years.
(b) Carry out a sensitivity analysis to determine which of the following variables is most sensitive to the feasibility of the order:

- Material costs
- Labour costs
- Additional cost of setup
Q. 6 Javed Limited is a listed company and is engaged in the business of manufacture and export of garments. $100 \%$ of the company's revenue comes from exports which are taxable @ $1 \%$ under final tax regime.

An extract of the company's latest balance sheet as on June 30, 2008 is as follows:

|  | Rs. in million |
| :--- | ---: |
| Ordinary Share capital (Rs. 10 each) | 100 |
| Capital Reserves | 40 |
| Retained Earnings | 85 |
|  | 225 |
| Term Finance Certificates (Rs. 100 each) | 150 |
|  | 375 |

Term Finance Certificates (TFCs) are due to be redeemed at par on June 30, 2010. TFCs carry floating mark up i.e. 6 months KIBOR plus $2 \%$ which is payable at half yearly intervals. Currently, TFCs with similar credit rating are available at six months KIBOR plus $1 \%$.

During the year ending June 30, 2009, the company expects to post a net profit of Rs. 15 million. Cost of equity of a similar ungeared company is $19 \%$. The shares of other companies in this sector are being traded at P/E ratio of 8. On June 30, 2008 the six monthly KIBOR was $14 \%$.

## Required:

Compute the Weighted Average Cost of Capital of the company as at July 1, 2008.
Q. 7 Mushtaq Limited is considering two possible investment projects. Both the projects have a life of one year only. The returns from new projects are uncertain and depend upon the growth rate of the economy. Estimated returns at different levels of economic growth are shown below:

| Economic | Probability | Returns (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Growth <br> (Annual Avg.) | of <br> Occurrence | Project 1 | Project 2 | Market |
| $1 \%$ | 0.25 | 20 | 22 | 30 |
| $3 \%$ | 0.50 | 30 | 28 | 25 |
| $5 \%$ | 0.25 | 40 | 40 | 40 |

Risk free rate of return is $10 \%$.

## Required:

Evaluate the above projects using the Capital Assets Pricing Model.

