**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

 **Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** **info@must.ac.ke**

**University Examinations 2014/2015**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE.

**BFC 3331: ADVANCED FINANCIAL MANAGEMENT**

**DATE: AUGUST 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Finance theory has a rota of principles, theories and concepts that describe how managers make financing decisions. Identify and describe any three theories or concepts that describe how managers make financing decisions (12 marks)
2. A project which will cost shs. 1,000,000 has a life of 5 years with no salvage value, depreciation is on a straight line and the required rate of return is 14%, tax rate is 30%. Sales are projected at 1000 units per year, the price per unit is shs. 2,000, variable cost shs.1,000 and fixed costs are shs. 600,000 per annum no changes in working capital is required. **Suppose the unit sales, price per unit, variable costs per unit and fixed costs projections are accurate to within 10%.**
3. What is the upper and lower bounds for these projections (4 marks)
4. Calculate the base case NPV (6 marks)
5. What are the best case and worst case scenario NPV (8 marks)

**QUESTION TWO (20 MARKS)**

1. With reference to capital structure decisions, briefly explain the following costs
2. Financial distress costs (2 marks)
3. Agency costs (2 marks)
4. Business risk (2 marks)
5. Two firms P and Q are in the same risk class and both have profit before interest and tax of 80 million. Firm P is all equity financed and its cost of equity Ksu=18%. Firm Q has Ksh. 80 million outstanding debt at a cost of Kd=12%. Corporation tax amounts to 30% and assumptions of Modigliani and Miller (1958) hold

Required

1. Establish the value and weighted average cost capital of firms P and Q (8 marks)
2. Describe four factors that influence the capital structure of a firm (6 marks)

**QUESTION THREE (20 MARKS)**

Assume that the following data and conditions hold for firm P

1. The firm currently has no debt it is all equity financed
2. Expected EBIT is shs. 4,8000,000 which remain constant over time
3. The firm pays out all its income as dividends
4. If the firm desires to borrow debt it can do so at 10% the borrowing rate is constant and does not change with the changes in the amount of debt, any amount raised through debt will be used to repurchase ordinary shares.
5. The business risk inherent in the firm’s assets and its EBIT is such that the beta is 0.8 (unlevered beta). The firm has not debt therefore the risk free rate is 7% and the market risk premium is 5%.

**Required**

1. Using CAPM determine the firms required rate of return (3 marks)
2. Using MM proposition 1 without taxes determine the value of firm P (3 marks)
3. Calculate the cost of equity and the WACC assuming that the firm borrows shs. 20 million debt (4 marks)

Assume that all the above conditions hold further the expected EBIT is shs. 800,000 firm P has a tax rate of 40%

1. Calculate the value of firm P with zero debt (6 marks)
2. What is the value of firm is it uses shs. 20 million debt (4 marks)

**QUESTION FOUR (20 MARKS)**

1. Saso Ltd faces an interest of 18% per annum and its brokers commission Sh. 70 for each transaction in the money market. The company chief finance officer has stated that the minimum cash balance that is acceptable is Sh 22,000 and that the variance of cash flows on a daily basis is Sh. 150,000
2. What is the maximum level of cash the firm should hold, and at what point should it start to purchase or sell securities? (10 marks)
3. What assumptions did you make in your calculations (4 marks)
4. Describe three economic advantages of leasing as a method of business financing (6 marks)

**QUESTION FIVE (20 MARKS)**

Meru Central farmers Ltd has decided to install a new milk processing machine. The machine costs shs. 600,000 and it would have a useful life of five years with a residual value of shs. 120,000 at the end of the fifth year. Additional cash profits from the machine would be shs. 240,000 a year for five years. A decision has now to be taken on the method of financing the project. Two methods of financing are being considered.

1. The company could purchase the machine for cash, using bank loan facilities on which the current rate of interest is 13% before tax.
2. The company could lease the machine under an agreement which would entail payment of shs. 144,000 at the end of each year for the next five years.

The company’s weighted average cost of capital, normally used for project evaluating, is 12% after tax. The rate of company income tax is 30%. If the machine is purchased, the company will be able to claim an annual tax depreciation allowance of 25% on the reducing balance.

**Required:**

1. Advise the management on whether to acquire the machine (6 marks)
2. The most economical method of financing (10 marks)
3. What other factors would be considered before making the final decision? (4 marks)