# TECHNICAL UNIVERSITY OF MOMBASA <br> Faculty of Business and Social Studies 

DEPARTMENT OF BUSINESS STUDIES

# UNIVERSITY EXAMINATIONS FOR DEGREE IN BACHELOR OF COMMERCE 

## BFI 4405: CORPORATE FINANCE

## END OF SEMESTER EXAMINATIONS <br> SERIES: APRIL 2015 <br> TIME: 2 HOURS

## INSTRUCTIONS:

- Answer Question ONE (Compulsory) and any other TWO questions.
- Do not write on the question paper

This paper consists of Three printed pages

## QUESTION 1 (Compulsory)

a) What are firm decision-makers hired to do?
b) What are the major advantages and disadvantages of the corporate form of organization? ( $\mathbf{5}$ marks)
c) Why is shareholder wealth maximization a more appropriate goal than a profit maximization.
d) Multifactor models of security returns have received increased attention in the recent times. The arbitrage pricing theory probably has drawn the most attention and has been proposed as a replacement of the CAPM.

## Required:

Explain the primary differences between APT and CAPM.
e) Discuss what you understand by CAMP.
f) What is the future value of a three year annuity due with a cash flow of $\$ 100$ per year, earning $6 \%$ ?
g) What is the present value of a $\$ 100$ perpetuity, given a discount rate of $8 \%$ compounded annually?
(2 marks)

## QUESTION 2

a) Mr Katana is contemplating purchasing a 3 year bond worth 40,000 carrying a nominal coupon rate of interest of $10 \%$. Mr. Katana required rate of return is $6 \%$.

- What should he be willing to pay now to purchase the bond if it matures at par?
(10 marks)
b) Panya Ltd is an all equity firm whose Beta factor is 1.2 , the interest rate on T. bills is currently at $8.5 \%$ and the market rate of return is $14.5 \%$.


## Required:

Determine the cost of equity Ke , for the company.

## QUESTION 3

a) Write briefly on the following capital structure theories:
i) Static Trade-off theory.
ii) MM Capital structure theory (Net income)
b) You have been given the following information relating to Nyuki Co.

Equity beta of Nyuki Co. = 1.2
Debt beta of Nyuki Co. $=0.1$
Market value of shoes of Nyuki Co. $=\$ 6 \mathrm{M}$
Market value of debt of Nyuki Co. $=\$ 1.5 \mathrm{M}$
Company profit tax rate $=25 \%$ per year.

After tax market value of company $=\$ 7.125 \mathrm{M}$

## Required:

Calculate the asset beta of a company.

## QUESTION 4

a) Pata Limited has the following details of two of the future production plans. Only one of these machines will be purchased and the venture would be taken to be virtually exclusive. The standard model costs shs. 50,000 and the Deluxe cost sh. 88,000 payable immediately. Both machines will require the input as the following:
i) Installation costs of sh. 20,000 for Standard and sh. 40,000 for the Deluxe.
ii) A sh. 10,000 working capital through their working lives.

Both machines have no expected scrap value at the end of their expected working lives of 4 years for the standard machine and six years for the Deluxe. The operating pre-tax net cashflows associated with the two machines are:

| Year | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Standard | 28,500 | 25,860 | 24,210 | 23,410 | - | - |
| Deluxe | 36,030 | 30,110 | 28,380 | 25,940 | 38,500 | 35,100 |

The deluxe machine has only been introduced in the market and has not been tested fully in the operating conditions, because of high risk involved the appropriate discount rate for the deluxe machine is believed to be $14 \%$ per annum, $2 \%$ higher than the rate of the standard machine.

The company is proposing the purchase of either machine with a term loan at a fixed rate of interest of $11 \%$ per annum, taxation at $30 \%$ is payable on operating cash-flows one year in arrears and capital allowance are available at $25 \%$ per annum on a reducing balance basis.

## Required:

For both the Standard and the Deluxe machines, calculate the payback period.
b) Discuss the merits of the NPV method.

## QUESTION 5

a) What are the essentials of a sound dividend policy of a corporation.
b) Discuss the assumptions of CAPM.

