# Eastern University, Sri Lanka 

Faculty of Commerce \& Management
Final Year First and Second Semester Examination in Bachelor of Business Administration 2011/12 (Mar/April 2015) (Special Repeat) MGT 4033 Financial Management

## Answer all Questions

Non-Programmable calculator permitted
Time: Three Hours
Q1. a) Distinguish between Systematic and Non-Systematic risk by using real world examples?
( 04 Marks)
b) The risk free rate of return is 11 percent. The expected rate of return on the market portfolio is 15 percent. The expected rate of growth for the dividend of firm $Z$ is 8 percent. The last dividend paid on the stock of firm $Z$ was Rs. 20. The beta of firm $Z$ 's stock is 1.3. What is the equilibrium price of the stock of firm Z ?
(05 Marks)
c) Suppose you have an opportunity of investing your wealth in either asset X and Y . The possible outcomes of two assets in different states of economy are given below:

| State of Economy | Return on <br> $\mathbf{X ( \% )}$ | Return on <br> $\mathbf{Y}(\%)$ | Probability |
| :---: | :---: | :---: | :---: |
| A | -8 | 14 | 0.10 |
| B | 10 | -4 | 0.20 |
| C | 8 | 6 | 0.40 |
| D | 5 | 15 | 0.20 |
| E | -4 | 20 | 0.10 |

i. Calculate the expected rate of return and standard deviation for X and Y separately.
ii. Calculate the coefficient of variation for both assets.
iii. If you are an investor, which company you would select for the investment?

Q2. a) Define the term ' Agency Problem' and briefly describe the goals of financial managemen
b) Suppose Rs. 30,000 is deposited at the end of each of the next three years at 10 percent int rate. How much amount of money will you receive after three years?
c) Suppose your Father gave you Rs. 10000 on your eighteenth birthday. You deposite amount in a bank at 10 percent rate of interest for five years. How much future would receive after five year?
d) Suppose you borrow Rs. 100,000 , you are going to repay the loan by making equal a payments for five years. The interest rate on the loan is 14 percent per year. Prepare an amortization schedule for the loan. How much interest will you pay over the the loan?

Q3. a) Bond A has an Rs. 10000 face value, its semiannual bond with the annual coupon rate of Discount rate $12 \%$ and it will be matured by 20 years. You are required to calculate the rat Bond?
b) The Raja Company is considering the following investment options. Earnings before intere and tax are given below:

| Year | Machine A | Machine B |
| :--- | :--- | :--- |
| 1 | 100,000 | 30,000 |
| 2 | 50,000 | 40,000 |
| 3 | 40,000 | 50,000 |
| 4 | 30,000 | 100,000 |

Each machine has the efficient outlay of 200,000 .
The depreciation is done on the straight line basis.
The tax rate is $50 \%$
Required rate of return $14 \%$

## You are required to calculate the following:

I. Accounting Rate of Return
II. Pay Back period
III. Discounted payback period
IV. Net present value
V. Internal Rate of Return

Q4. a) What factors should be considered when estimating a project's Net Investment?
b) The MGT company Ltd has the following capital structure on $30^{\text {th }}$ January 2015

Ordinary shares ( 20000 shares)

$$
\begin{aligned}
& 4,000,000 \\
& 1,000,000 \\
& 3,000,000
\end{aligned}
$$

$10 \%$ preference shares
14\% Debentures

The market price of the company is $20 /=$
It is expected that the company will pay next year dividend of Rs. 2 which will grow at $7 \%$ after, tax is $50 \%$.
I. Compare weighted average cost of capital based on the existing capital structure.
II. Compute new weighted average cost of capital if the company raises additional Rs. 2 million debt by issuing $15 \%$ debentures. (This would result in increasing the expected dividend from 2 to 3 , growth rate remaining unchanged and price of the share will fall to $15 /=$ per share)
( 16 Marks)
(Total 20 Marks)

Q5. a) Briefly explain the components of cost of capital.
b) Company earns and paid Rs. 3.48 per share as dividend. It's earnings and dividends expected to grow at $15 \%$ for 4 years and then at the rate of $8 \%$, the capitalization rail $18 \%$.What is the value of the share today?
c) A Cosmetic company is considering to introduce a new lotion which is useful both in win and summers. The manufacturing equipment will cost Rs. 5, 60,000 . The expected life of equipment is 8 years. The company is thinking of selling the notion in a single standard paid 50 grams at Rs. 12 each pack. It is estimated that variable cost per pack would be Rs. 6 annual fixed cost Rs. 450,000. Fixed cost includes (straight line) depreciation of Rs. 70,000: allocated overheads of Rs. 30,000 . The company expects to sell 100,000 packs of lotione year. Assume that the tax rate is 45 percent and straight line depreciation is allowed for purposes. If the opportunity cost of capital is 12 percent should the company manufacture lotion?

