UNIVERSITY OF EMBU

2017/2018 ACADEMIC YEAR

## SECOND SEMESTER EXAMINATIONS

FIRST YEAR TRIMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

DFI 407: CONTEMPORARY ISSUES IN FINANCIAL MANAGEMENT
DATE: APRIL 6, 2018
TIME: 11:00 AM - 1:00 PM

## INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

## QUESTION ONE ( 30 MARKS)

a) Briefly explain five factors to consider when making investment decisions.
b) Discuss how investors can use financial derivatives to hedge against financial risks (6 marks)
c) Briefly explain the implications of efficient market hypothesis for financial decision makers.
d) Discuss any two investment theories that will guide you in your financial investment decisions.
e) Explain the importance of capital budgeting in modern organizations.
f) Explain two reasons of capital rationing by an company

## OUESTION TWO (20 MARKS)

a) With relevant examples differentiate between systematic and unsystematic risk (6 marks)
b) Company A is considering investing in a project which has a three year life. The project would involve an initial investment of Sh. 20 million. The finance manager has come up with expected probabilities for various possible economic conditions as follows:

| Year | Economic <br> Conditions | Sh.'000' <br> Net <br> flows |
| :--- | :--- | ---: | :--- |
| 0 | cash |  | Probability

Assume cost of capital is $15 \%$.Required: calculate the following:
i) Net present value (NPV)
ii) Profitability index (PI)
iii) Payback period
c) Advice company on whether to invest in the project.

## QUESTION THREE (20 MARKS)

a) Briefly explain the following terms as used to explain the efficient market hypothesis
i) Allocative efficiency (4 marks)
ii) Operational efficiency (4 marks)
iii) Information efficiency (4 marks)
b) Consider two investments that have cash flow streams and assonated probabilities.

| Project A |  |  | Project B |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cashflows | Utiles | Prob. | Cashflows | Utiles | Prob. |
| Sh -20,000 | -0.20 | 0.10 | Sh -25,000 | -0.25 | 0.10 |
| 0 | 0 | 0.10 | 0 | 0 | 0.20 |
| 60,000 | 0.60 | 0.60 | 50,000 | 0.50 | 0.50 |
| 80,000 | 0.80 | 0.50 | 100,000 | 1.00 | 0.20 |

Appraise the two projects using:
i) The expected monetary value for Project A and B
ii) The expected utility value for Project A and B

## QUESTION FOUR (20 MARKS)

The Management of MM Ltd is faced with eight projects to invest in. The capital expenditures during the year has been rationed to $\mathrm{Sh} 500,000$ and the projects have equal risk and therefore should be discounted at the firm's cost of capital of 10\%. The following information about the projects has been availed.

Project
Cost
Project
Cashflow NPV at the
$t=0$
(Shs)
Life
per year $10 \%$ cost
$1 \quad 400,000$
20
58,600
98,895
2 250,000
10
55,000
87,951
3100,000
8
24,000
28,038
$4 \quad 75,000$
15
12,000
16,273
$5 \quad 75,000$
$6 \quad 50,000$
6
18,000
3,395
$7 \quad 250,000$
$8 \quad 250,000$
5
14,000
3,071
10
41,000
1,927
8
3
99,000
$(3,802)$

## Required:

a) For each project calculate the Profitability index
b) Determine the optimal investment sets (a combination of investment projects that will yield the highest returns for the company after taking into consideration the available funds.
c) What is the total return from the project identified in $b$ above?

## QUESTION FIVE (20 MARKS)

a) You own a stock currently worth kshs 100,000 today. You plan to sell it in 60 days. To hedge against a possible decline in price you enter into a forward contract to sell the security. The annualized risk free rate is 3.5 percent
i) Calculate the forward price of this contract.
ii) Suppose the market dealer offers an off market contract at kshs 100,200 how could you earn an arbitrage profit. ( 5 marks)
b) Differentiate between a call option and a put option.
c) Briefly explain the determinants of option prices

