

## **GRETSA UNIVERSITY - THIKA**

# UNIVERSITY EXAMINATIONS MAY-AUGUST 2018 SEMESTER

#### **DIPLOMA IN BUSINESS**

**COURSE CODE: DBFI 014** 

COURSE TITLE: INVESTMENT AND PORTFOLIO MANAGEMENT

DATE: 7 AUGUST 2018 TIME: 8.00AM-11.00AM

#### INSTRUCTIONS TO CANDIDATES

- 1. SECTION A IS **COMPULSORY**
- 2. SECTION B: ANSWER ANY OTHER THREE QUESTIONS
- 3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
- 4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

**CAUTION:** All exam rooms are under CCTV surveillance during the examination period

#### **SECTION A: COMPULSORY**

#### **Ouestion One:**

- a) In Economic theory the behavior of a firm is analyzed in terms of profit maximization which means that a firm either produces maximum output for a given output or minimum output for producing a given output. Explain the types of financial ratios that can be used to analyze whether the firm is doing well on not [15 Marks]
- **b**) The investment in A and B contain the following information:

Economic	probability	Returns in A	Returns in B
Condition			
good	0.5	40%	0
bad	0.5	0	40%

Assuming that the investor invests in both the assets equally. Calculate:

i. The expected rate of return

[3 marks]

ii. The variance

[3 marks]

iii. Standard deviation

[3 marks]

- c) In practice the market portfolio is approximated by a well-diversified share price index. In theory the market portfolio should include all risky assets. Discuss the assumption of Capital Asset Price Model (CAPM) [10 Marks]
- d) Secondary capital markets deal in the second hand issued securities. Explain any 3 segments of the Nairobi Securities exchange [6 marks]

#### **SECTION B: ANSWER ANY THREE QUESTIONS**

#### **Question Two:**

- a) Financial distress becomes costly when the firm finds it difficult to pay interest and principal. They do not reflect the debt- servicing ability of the firm. Explain the disadvantages of using ratio analysis in predicting the financial behavior [8 marks]
- **b)** In practice the investors can reduce non-systematic risk by diversifying their investment in shares of a large number of companies. Explain the 4 types of derivatives that investors can use in risk managing their assets

# **Question Thee:**

[12 marks]

- a) Capital markets facilitate the buying and selling of securities such as shares and bonds or debentures. They perform two valuable functions that is liquidity and pricing of securities. Discuss the attributes of a perfect capital market [12]
- **b)** The capital structure should be designed very careful such the management should target a capital structure that is optimal. Explain the 8 types of financial markets that

### **Question Four:**

(a) Dominic wants to invest in securities of 3 companies that is Unga Limited, Mtama Limited and Wimbi limited. If the portfolio value is sh.10 million. All the three companies have the following information

	UNGA LTD	MTAMA LTD	WIMBI LTD
Standard deviation	20%	16%	24%
Standard deviation	2070	1070	2470
weight of Unga and			
Mtama Ltd	70%	30%	0
weight of Unga and			
Wimbi Ltd	50%	0	50%
Weight of Mtama and			
Wimbi Ltd	0	60%	40%
market rate of return	22%	18%	26%
risk free rate	16%		
correlation			
coefficient:between			
Unga and Mtama Ltd	-50%		
correlation coefficient:			
Unga and Wimbi Ltd	80%		
correlation coefficient:			
Mtama and Wimbi Ltd	40%		
1% signicance level		ı	1

## Required:

a) Calculate the portfolio risk of all the two assets combinations

[7 marks]

**b**) Calculate the VaR of the two possible assets combinations

[6 marks]

c) Calculate the minimum profit that the two assets combinations will yield

[3 marks]

d) Explain the disadvantages of using the Markowitz model of analyzing risk

[4 marks]

#### **Question Five:**

a) The degree of financial efficiency depends on the level of information disclosure and the speed with which the information is processed in the market and incorporated in the shares. Discuss the forms of capital market efficiency as described by Eugene Fama

[12

marks]

**b)** Under CAPM , the risk of an individual risky security is defined as the volatility of the security,s security vis-a vis the return of the market portfolio. Explain the differences between the Arbtrage Pricing Theory(APT) and Capital Asset Pricing Model(CAPM)

[8 marks]