



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

JANUARY – APRIL 2017 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

EVENING / REGULAR PROGRAMME

CFI 312: RISK MANAGEMENT

Date: April 2017

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. Jumbo Airlines was recently incorporated in Kenya to offer low cost air travel within the East African Region. You have been appointed the risk manager of the airline.
Required:
- a) Explain to the management what your role is as the risk manager. (6 marks)
 - b) Explain the steps you will go through in the risk management process. (6 marks)
 - c) Identify the specific business risks facing the airline. (12 marks)
 - d) Recommend risk controls for the risks. (6 marks)
- Q2. a) The three major risk management methods include loss control, loss financing and internal risk reduction. Discuss. (12 marks)
- b) Explain how risk creates an economic burden. (8 marks)
- Q3. Write notes on the following
- a) Levels of risk (5 marks)
 - b) Moral hazard and Morale hazard (5 marks)
 - c) Credit risk (5 marks)
 - d) Longevity risk (5 marks)

- Q4. The following are probability distributions for two companies, Alpha and Beta. Jackie has an opportunity to invest \$40,000 in either company or invest in a portfolio of the two companies (60% in Alpha and 40% in Beta). Alpha performs best in wet and cold weather while Beta performs best in dry and moderate weather conditions.

Weather Condition	Probability	Return - Alpha	Return- Beta
Wet	0.25	35%	-8%
Cold	0.25	15%	5%
Moderate	0.25	6%	12%
Dry	0.25	-10%	30%

Required:

- Explain the process of distributing your funds among different investments. **(2marks)**
- Identify the relationship between Alpha and Beta and give two examples of companies familiar to you. **(4 marks)**
- Show through calculations which investment is more risky, Alpha or Beta. **(7 marks)**
- Calculate the standard deviation of the portfolio and interpret your answer. **(7 marks)**

$$\text{Variance} = \sum_{i=1}^n p_i (x_i - \mu)^2$$

$$\text{Standard Deviation} = \sqrt{\sum_{i=1}^n p_i (x_i - \mu)^2}$$

$$\text{Cov}(R_A, R_B) = \sum_{i=1}^n (R_{A_i} - \bar{R}_A)(R_{B_i} - \bar{R}_B) p_i$$

$$\sigma_p = \sqrt{a^2 \sigma_A^2 + (1-a)^2 \sigma_B^2 + 2a(1-a) \text{Cov}(R_A, R_B)}$$

END