UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT & FINANCE

Bachelor of Business Administration (Level II – Semester VII) Examination
July 2017

BEC 2206 –Financial Economics

Two (02) Hours

Answer Only Four (04) Questions

Use of calculators is permitted

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1. i. Consider a strictly concave utility function. Explain what is meant by the risk averseness of an investor in terms of such a function.

(05 Marks)

ii. "Under uncertainty, ranking bundles of goods involves more than pure elements of tastes and preferences".

In the context of choice under uncertainty, how do you elaborate on the above statement?

(07 Marks)

iii. "A more risk averse investor may assign a portfolio with even a positive risk premium a certainty equivalent rate of return that is below the risk-free rate".

Explain the phenomenon that the above statement is referring to.

(08 Marks)

iv. "A less risk averse investor may have a flatter indifference curve".

What is meant by the above statement?

(05 Marks)

(Total 25 marks)

2. i. Why is it argued that Reward-to-Variability ratio is a better measure of return than the absolute return?

(04 Marks)

ii. "When it comes to capital allocation between risky and risk-free assets, an investor selects the investment proportion of the risky asset in the portfolio in such a way that his/her utility is maximized"

Obtain an expression for the investment proportion of the risky asset in the portfolio and comment on the relationship between it and the variables involved.

(07 Marks)

iii. "Mutual Fund Theorem is another incarnation of separation property".

a. What is meant by the Mutual Fund Theorem?

(04 Marks)

b. What does this statement refer to?

(03 Marks)

iv. "The most relevant measure of risk for individual assets held as parts of well-diversified portfolio is not the asset's standard deviation"

Elaborate on the above statement in the light of Capital Asset Pricing Model (CAPM).

(07 Marks)

(Total 25 marks)

3 i. Why is it argued that multifactor models provide more appropriate framework for asset pricing than single index models?

(07 Marks)

ii. Consider multi-factor models of asset pricing. Explain

a. how the single-factor framework can be generalized to allow for multiple sources of risk.

(04 Marks)

b. how to estimate the risk premium for each factor.

(03 Marks)

iii. Explain the role of each of the following in asset pricing. Which one is practically more appropriate?

- Absence of arbitrage opportunities
- Mean-variance dominance.

(06 Marks)

iv. "Well diversified portfolios with same betas but different expected returns will create arbitrage opportunities".

Elaborate on this idea in the context of factor models.

(05 Marks)

(Total 25 marks)

4. i. "Even if markets are efficient, still there is a role for active portfolio management".

Do you agree with the above statement? Give reasons for your answer.

(06 Marks)

ii. Examine the following:

a. Weak form tests

(07 Marks)

b. Semi-strong from tests

(07 Marks)

iii. "In asset pricing, Single Index model is not different from the Capital Asset Pricing Model (CAPM)".

Comment on the above statement.

(05 Marks)

(Total 25 marks)

ii. Suppose that Alpha prefers to borrow at a floating rate and Beta prefers to borrow at a fixed rate. What may make them prefer to borrow at a different type of rate rather than borrow at the type of rate in which they have comparative advantage?

(03 Marks)

iii. Suppose that the two parties enter into a swap agreement where Alpha has to pay LIBOR per annum and Beta has to pay 7.5% per annum.

a. Draw a diagram to show interest rate flows.

b. Find the net interest rates that Alpha and Beta pay after the swap agreement.

(05 Marks)

iv. Find the gains from the swap agreement for each firm.

(02 Marks)

v. *Suppose that it is a financial institution that will* arrange the swap agreement and they charge 0.2% for their service.

a. Draw a diagram to show the amended interest rate flows.

b. Find the new interest rates that the two forms pay after the swap agreement.

(05 Marks)

vi. Find the gains for all three parties from the swap agreement.

(02 Marks)

vii. Explain the rationale on which the valuation of interest rate swaps is based (you are not supposed to calculate the value of the swap).

(03 Marks)

viii. Briefly explain how to find the price of the above swap (you are not supposed to calculate the price).

(02 Marks)

(Total 25 marks)