

UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Level II-Semester VI) Examination-
November, 2018

FIN 2303-Investment Analysis and Portfolio Management

Three (03) Hours

Instructions to candidates

- **Answer all questions**
 - **Use of Calculators is permitted**
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1. Read the questions below (a) to (f) and write your answers with sufficient explanations:

a. Is it certain that working out an “**Investment policy**” will lead to a successful investment all the time?

(04 Marks)

b. Do share markets generate capital (funds) for its listed entities?

(04 Marks)

c. If an investment offers a higher return than the existing ones at a given level of risk, will it be considered as a ‘**better investment**’?

(05 Marks)

d. How does a ‘**Sharia -compliant investment policy**’ be a good example for policies generally imposed on the portfolio by the investor himself?

(03 Marks)

e. What are the five steps in the investment process and what is the importance of each step in the entire process?

(06 Marks)

f. Why does it not make sense to establish an investment objective of “**making a lot of money**”?

(03 Marks)

(Total 25 Marks)

2.

- i. Differentiate between “Stop – loss orders” and “Stop- buy orders”.

(06 Marks)

- ii. Amaya opened a margin account at a stock brokerage firm. Amaya’s initial investment was to purchase 200 shares of “Abhaya Ltd” on margin at Rs.40/= per share. Amaya borrowed Rs. 3,000 from a broker to complete the purchase. The Maintenance Margin Requirement (MMR) is 20%.

- a. Once the margin purchase is done for Amaya, how many shares will be kept with the broker?

(02 Marks)

- b. Prepare the Amaya’s balance sheet as of the initial transaction.

(03 Marks)

- c. Subsequently, if “Abhaya” stock fall to Rs.20/=, will Amaya receive a margin call?

(04 Marks)

- d. Over the year, however, if the stock rises to Rs.65/= and the annual interest on margin loans is 12%, what is the Amaya’s rate of return?

(03 Marks)

- iii. The Stock of Ruwan Inc. sold at the beginning of the year for Rs.70/= per share. At that time Ishara short sold 1,000 shares of the stock. The initial margin requirement was 50%.Ruwan stock has risen to Rs. 75/= at year-end, and Ishara faced no margin calls in the interim. Further, the stock paid a Rs. 2/= (per share) dividend at year-end. What was the Ishara’s return on investment?

(05 Marks)

- iv. Distinguish between an investor receiving a margin call and having his or her margin account restricted.

(02 Marks)

(Total 25 Marks)

3.

- i. If a portfolio's expected return is equal to the weighted average of the expected returns of the component securities, why is a portfolio's risk is not generally equal to the weighted average of the component securities' standard deviations?
(05 Marks)
- ii. Why would you expect individual securities to generally lie in the eastern portion of the feasible set, whereas only portfolios would lie in the North- West portion?
(04 Marks)
- iii. Indicate the "Variance - Co-variance matrix" through the process of *double summation* for a portfolio which consists of 04 securities and derive the Standard Deviation (SD) equation for this portfolio.
(05 Marks)
- iv. Following depict the expected returns (ERs) and the Variance - Covariance Matrix (VCM) of Chanaka's portfolio:

$$E(R) = \begin{pmatrix} P & 10.1 \\ Q & 7.8 \\ R & 5.0 \end{pmatrix} \quad VCB = \begin{pmatrix} & P & Q & R \\ P & 210 & 60 & 0 \\ Q & 60 & 90 & 0 \\ R & 0 & 0 & 0 \end{pmatrix}$$

Given the fact that Chanaka's risky portfolio is split 60:40 between the two risky assets respectively,

- a. Which must be the risk-free asset among above 3 securities? Justify your answer.
(02 Marks)
- b. Calculate the expected return and Standard Deviation (SD) of Chanaka's risky portfolio.
(05 Marks)
- c. If the risk free asset makes up 25% of the Chanaka's total portfolio, what are the total portfolios expected return and SD?
(04 Marks)

(Total 25 Marks)

4.

- i. **“Capital Asset Pricing Model (CAPM)”** implies that it is possible to earn higher return than those of the market as a whole by taking on higher risk (beta).

Do you agree with the statement above? Explain your answer.

(05 Marks)

- ii. With the help of the information given below, recommend which stocks are to be purchased by a rational investor in this market. Assume that the market is rising currently with a significant potential.

Stock	Beta	Required Return (R _i)	Estimated Return
A	0.70	10.2	10
B	1.00	12	6.2
C	1.15	12.9	21.2
D	1.40	14.4	3.3
E	-0.30	4.2	8.0

(07 Marks)

- iii. Answer following questions with real- life examples as appropriate.

a. What is “private equity investment” and how it differs from “Venture capital investment”?

(05 Marks)

b. What will be the consequences if the Employee Provident Fund (EPF), the largest annuity fund in Sri Lanka, returns to the stock market soon as per the public declaration made by the Central Bank governor- Sri Lanka in August, 2018?

(04 Marks)

c. Should the two major state banks in Sri Lanka be listed in the Colombo Stock Exchange (CSE)?

(04 marks)

(Total 25 Marks)