EASTERN UNIVERSITY, SRI LANKA

## FACULTY OF COMMERCE AND MANAGEMENT

Final Year First Semester Examination in Bachelor of Commerce (Specialization in Accounting and Finance)-2013/2014(April/May 2017)(Special Repeat)

## DAF 4043 Portfolio Investment Analysis

Time Allowed: 03 Hours
hnswer All Questions
Hon Programmable Calculators are permitted.

Explain the difference between the terms "Finance" and "Investment"
(10 Marks)
II) Explain the followings:
a) Money Market and Capital Market
b) Primary Market and Secondary Market
(I) Calculate the Expected Rate of Return and the Standard Deviation of the Returns for an investment from the following information.

| Possible Returns (\%) | 12.5 | 23.4 | 13.6 | 02.5 | -14.2 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Probabilities | 0.12 | 0.24 | 0.21 | 0.25 | 0.18 |

(III) Securities J and K have the following characteristics:

| Probability | Possible Return (\%) |  |
| :---: | :---: | :---: |
|  | Security J | Security K |
| 0.10 | -10.5 | 30.5 |
| 0.30 | 12.6 | 15.0 |
| 0.35 | 10.0 | 05.8 |
| 0.25 | 25.4 | -12.6 |

## Required:

Calculate the following:
(a) The Expected Rate of Return and Standard Deviation of returnst security.
(b) The Expected Rate of Return and the Standard deviation of the eit the portfolio of $J$ and $K$, combined with weights of $2 / 3$ and $1 / 3$ respall]
(20)
(Total 30
03. (I) In terms of the Markowitz portfolio model, explain, how an investor idenitity her optimal portfolio. What specific information does an investor need toit optimal portfolio?
(II) If the risk-free rate of return is $6 \%$ and the return on the market portfolio what is the expected return on an asset having a Beta of 1.8 according CAPM?
(III) An Investor owns a portfolio of four securities. The characteristics securities and their amount of investment in the portfolio are presented ber

| Security | Beta | Investment (Rs.) |
| :--- | :--- | :--- |
| A | 0.80 | 100,000 |
| B | 1.25 | 100,000 |
| C | 1.00 | 75,000 |
| D | 0.60 | 125,000 |

## Required:

(a) What is the expected rate of return of this portfolio if the risk-free rate of $9 \%$ and the expected market rate of return is $16 \%$ ?
(b) What is the risk of the portfolio?

From the following data compute beta of security j
$\sigma=15.8 \% \quad \sigma_{m}=6.5 \% \quad \operatorname{Cor}_{\mathrm{j}}=+0.67$
(II) An investor holds an investment on the bonds of LDY plc having a par value of Rs. 1000 each with coupon rate of $14 \%$ per annum payable semi annually and the maturity of 10 years.
(i) What is the value of a bond today if the market rate of return is $12 \%$ ?
(ii) What will be the value of the bond if the market interest rate increases to $16 \%$ at the end of one year from today?
(iii) If the value of the bond is Rs. 1200 after two years from the date of issue, what would be the YTM of the bond?
(10 Marks)
(Total 20 Marks)

