

EASTERN UNIVERSITY, SRI LANKA  
FACULTY OF COMMERCE AND MANAGEMENT

Final Year First Semester Examination in Bachelor of Commerce (Specialization in  
Accounting and Finance)-2012/2013 (February 2015) (Proper/Repeat)

**DAF 4043 Portfolio Investment Analysis**

**Answer All Questions**

**Time Allowed: 03 Hours**

**Non Programmable Calculators are permitted.**

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01. (I) Define the term " investment" (02 Marks)
- (II) How could you describe the investment environment? (02 Marks)
- (III) Explain the difference between direct and indirect investing. (04 Marks)
- (IV) Why Treasury bills are considered as a risk free investment? (04 Marks)
- (V) Comment the differences between investment in financial and physical assets using following characteristics:  
a) Divisibility    b) Liquidity    c) Holding period    d) Information ability (08 Marks)
- (Total 20 Marks)**
02. (I) Comment why methods and tools of the statistics are so important in investment decision making. (05 Marks)
- (II) The following investment portfolios are evaluated by investor

Portfolio	Expected rate of return, %	Standard deviation %
A	18	20
B	12	10
C	12	11

Using Markowitz portfolio theory explain the choice for investor between Portfolios A, B and C.

**(05 marks)**

(III) Define the components of holding period return.

(05 Marks)

(IV) How do you understand an investment risk and what statistic tools can be used to measure it?

(05 Marks)

(Total 20 Marks)

03. (I) In terms of the Markowitz portfolio model, explain, how an investor identify his / her optimal portfolio. What specific information does an investor need to identify optimal portfolio?

(06 Marks)

(II) Describe the key assumptions underlying CAPM.

(04 Marks)

(III) The risk-free rate is 7% and the expected return on the market is 15%. If Oliver Company has a beta of 1.2, calculate the expected return on Oliver Company's stock.

(05 Marks)

(IV) What is Market Efficiency? What are the forms of market efficiency under efficient Market hypothesis?

(05 Marks)

(Total 20 Marks)

04. (I) An Investor plans to hold shares of X plc for 2 years. X plc expects to pay its shareholders ordinary share at Rs.25 per share over the next year. The investor anticipates X plc share will close the end of the time period at Rs.40 per share given a rate of return of 10%. What is the value of X plc ordinary share at the two years' time period?

(05 Marks)

(II) MAS Company paid Rs.12 annual dividend in 2015 and expects to pay Rs.50 annual dividend in 2016 assuming a 6% growth rate and a required rate of return of 10%. Calculate the value of a share.

**(05 Marks)**

(III) What is the value of ACL plc's common stock at the end of the 3 years time period in following case?. An investor plans to hold ACL plc's stock for 3 years. In that time period ACL plc plans to grow at the rate 6% in the first 2 years and 3% thereafter. ACL plc's last dividend was Rs. 25 given a rate of return of 10%.

**(05 Marks)**

(IV) Determine the company's P/E Ratio if the DDM Dialog company's dividend payout is Rs.32.50 and EPS is Rs 100. Assume 10% required return and 5% growth rate.

**(05 Marks)**

**(Total 20 Marks)**

05. (I) Calculate the price of a bond with a par value of Rs.1,000 to be paid in ten years, a coupon rate of 10%, and a required yield of 12% assuming that coupon payments are made semi-annually to bond holders and that the next coupon payment is expected in six Months.

**(07 Marks)**

(II) A portfolio contains three securities with weights of 50%, 25% and 25% respectively. The beta of security A is 1.25. Security B's beta is 0.95 and security C's beta is 1.05. Calculate the beta of the portfolio.

**(03 Marks)**

(III) An investor owns a portfolio of four securities. The characteristics of the securities and their amount of investment in the portfolio are presented below:

Security	Beta	Investment
A	0.60	200,000
B	1.50	200,000
C	1.00	175,000
D	0.60	125,000

**Required:**

- (a) What is the expected rate of return of this portfolio if the risk – free rate of return is 7% and the expected market rate of return is 10%?
- (b) What is the risk of portfolio?
- (c) If the investor wants to reduce risk in his portfolio how he could restructure his portfolio?

**(10 Marks)**

**(Total 20 Marks)**