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**University Examinations 2015/2016**

THIRD YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

**BFC 3379: INVESTMENT ANALYSIS POORTFOLIO AND MANAGEMENT**

**DATE: NOVEMBER 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Discuss the assumptions of CAPM (5 Marks)
2. Explain the practical application of CAPM) (5 Marks)
3. Explain the advantages of CAPM (5 Marks)
4. The following information is provided

|  |  |
| --- | --- |
| Current value of underlying stock | Shs 21 |
| Risk free rate | 5% |
| Strike price of option | 21 |
| Option time period | 0.36 years |
| Variance of the rate of return on the stock | 0.09 |

**Required:**

Using Black and scholes option valuation model, compute the value of the option (15 Marks)

**QUESTION TWO (20 MARKS)**

1. Year life and project returns depend on next year’s state of the economy. The estimated rates of returns are shown below.

**STATE PF THE PROBABILITY OF RATE PF RETURN**

**ECONOMY OCCURRENCE A B C**

Recession 0.25 10% 9% 14%

Average 0.50 14% 13% 12%

BOOM 0.25 16% 18% 10%

**Required:**

1. Find each project expected rate of return and standard deviation (6 Marks)
2. Computer the correlation coefficient between (6 Marks)
3. A and B
4. A and C
5. B and C
6. Compute the standard deviation of the portfolio. (3 Marks)
7. Discuss factors that would affect the value of a call option (5 Marks)

**QUESTION THREE (20 MARKS)**

1. Explain the main forms of capital market efficiency (12 Marks)
2. The capital market has no memory. Discuss (3 Marks)
3. Differentiate between investment and gambling (5 Marks)

**QUESTION FOUR (20 MARKS)**

1. Explain the differences between future and forward contracts (5 Marks)
2. On 1st March 2011, a Kenyan importer purchased goods fro USA worth 120,000 dollars to be paid two months later on 30th April 2011.

Kenya shillings futures are available in the money market and can be bought in blocks of Ksh 100,000 and each future contract costs Ksh 1,000.

Sport exchange rate on 1st March 2011 was:

Ksh 76.5= 1US dollar.

Exchange rate on 30th April 2011 Ksh79.50 = 1 US dollar and the exchange rate at which the futures were closed out was. Ksh 77.5 = 1 US dollar.

**Required:**

Computer the net loss or gain of using the future contract (15 Marks)

**QUESTION FIVE (20 MARKS)**

1. Explain the main measures of portfolio performance (6 Marks)
2. An investor has the following portfolios

|  |  |  |
| --- | --- | --- |
| **Portfolio** | **Expected return** | **Standard deviation** |
| 1 | 19 | 8 |
| 2 | 25 | 12 |
| 3 | 16 | 6 |
| 4 | 32 | 16 |
| 5 | 22.5 | 10 |
| 6 | 8 | 2 |
| M | 12 | 4 |

1. Rank the above portfolios in their order of performance (8 Marks)
2. Indicate what should be the standard deviation for portfolios not performing well (3 Marks)
3. Indicate what should be the expected return for portfolio underperforming (3 Marks)