

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

**Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.mucst.ac.ke**](http://www.mucst.ac.ke) **Email:** [**info@mucst.ac.ke**](mailto:info@mucst.ac.ke)

**University Examinations 2014/2015**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF PURCHASING AND SUPPLIES MANAGEMENT.

**HPS 2307: INVESTMENT MANAGEMENT**

**DATE: DECEMBER 2014 TIME: 2 HOURS**

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

**QUESTION ONE**

1. Discuss the importance of investment analysis (4 marks)
2. Explain the various forms of market efficiency and empirical test done to validate them. (8 marks)
3. The directors Moti ltd are examining a proposal for strategic move into a new business activity. They have identified a potential competitor, Makutano ltd that has a quoted equity Beta of 1.3 and a debt equity ratio of 1:4. This is unlikely to chage in the foreseeable future. The post tax return on the market is expected to be 12% and the risk free rate is 5%. The debt Beta of Moti ltd is 0.15 corporate tax is 30%.

**Required:**

Calculate the discount rate to be used in the investment decision using CAPM.

(10 marks)

1. Explain the reasons for valuations (8 marks)

**QUESTION TWO**

1. Consider the returns of two securities A and B which depend on the states of nature with the following probabilities

Returns %

State Probability A B

Recession 0.3 12 6

Stable 0.4 15 7.5

Expansion 0.3 10 5

**Requirements**

1. Compute the expected returns of A and B (2 marks)
2. Compute the standard deviation of the individual securities (4 marks)
3. Compute the correlation coefficient between the two securities returns and comment

(6 marks)

1. Compute portfolios expected return for a portfolio consisting of 60% of A and 40% of B (4 marks)
2. Compute the risk of the portfolio in (iv) above (4 marks)

**QUESTION THREE**

1. Differentiate between portfolio theory and CAPM (6 marks)
2. The directors of Upendo limited, wish to use an alternative estimate cost of capital. They prefer to use the capital asset model. The following details have been provided

Security Returns Variance of returns (%) Covariance of returns of security A

with the market

M 18.64 0.3047 0.3047

B 16.45 0.3721 0.2986

C 10.18 0.0 0.0

D 30.20 1.5876 0.5606

E 15.47 0.2043 0.3737

U - - 0.4571

**Required**

1. Determine the beta coefficient of each security and interpret the result of each

(8 marks)

1. Predict the cost of capital of Upendo ltd using the capital asset pricing model

(6 marks)

**QUESTION FOUR**

1. Discuss factors that determine the value of options (8 marks)
2. The shares of ABC ltd, are currently selling at sh 290 each at the security exchange. The exercise price for a six month call option is sh 260. Prevailing risk free rate is 129 p.a. The variance of ABC ltd share price has been 15%.

**Required:**

Using black scholes option valuation model, determine the value of such an option (12 marks)

**QUESTION FIVE**

1. The Nairobi securities exchange is currently working on modalities of introducing the first ever commodities exchange in Kenya.

**Required:**

Critically evaluate this effort considering current market development in Kenya and the advantages of such exchange platform (8 marks)

1. The following statement contains several errors with reference to the three levels of market efficiency. According to the efficient market hypothesis all share prices are current at all times. This is achieved by prices making randomly when new information is publicly announced. New information from published accounts is the only determinant of the random movements in share price fundamental and technical analysis of the stock market serves no function in making the market efficient and cannot predict future share prices. Corporate financial managers are also unable to predict future share prices. Explain the errors in the above statement (12 marks)