# **KABARAK**



# UNIVERSITY

# UNIVERSITY EXAMINATIONS 2009/2010 ACADEMIC YEAR FOR THE DEGREE OF BACHELOR OF COMMERCE

**COURSE CODE: FNCE 412** 

COURSE TITLE: SECURITY VALUATIONS AND PORTFOLIO MANAGEMENT

STREAM: Y4S1

DAY: TUESDAY

TIME: 2:00-4:00 P.M.

**DATE:** 01/12/2009

## **Instructions**

- 1. Answer question **one** and any **other two** questions.
- 2. Marks allocated are shown at the end of each question.
- 3. Show all your workings.

#### **QUESTION ONE**

- a) In portfolio management explain the meaning of efficient capital markets and discuss
  the three levels of efficiency. In your opinion, using examples explain the level of
  efficiency of the Nairobi Stock Exchange. (10mks)
- b) The Capital Markets Authority of Kenya recently indicated that in the near future, properties (real estates) will be listed at the Nairobi Stock Exchange. Discuss the drawbacks of investing in the real estates and explain how this development will help to overcome the drawbacks. (10mks)
- c) What is the distinction between financial facilitations and financial intermediation? (4mks)
- d) Compare and contrast the Capital Asset Pricing Model (CAMP) and the Arbitrage
   Pricing Model (APT) (6mks)

(Total 30 marks)

### **QUESTION TWO**

a) In relation to option trading, explain the meaning of a straddle and discuss how it can be used by an investor as a strategy to minimize risks in option trading.

(6mks)

b) The stock of Kenya Commercial Bank (KCB) is currently selling at Kshs. 58.875 and a three call option written on the same stock is selling at shs. 27. The current treasury bills rate in Kenya is 8% per annum and the standard deviation of KCB annual stock return is 0.22, what is the value of a call option on KCB's stock with 3 months to expiration? (6mks)

Note 
$$C = SN(d_1) - Ke^{-rt} N(d_s)$$

- c) Using graphs, explain the difference in terms of profit profile between a put option and a call option from the perspective of a holder and a writer. (4mks)
- d) What are the four main limitations of Black Scholes Option pricing model?

(4mks)

(Total 20 marks)

## **QUESTION THREE**

- a) Discuss three different risks that an investor holding bond portfolio is exposed to.

  (6mks)
- b) A bond of Safaricom with 10 years to maturity and zero coupons is currently being sold at Shs. 385. The bond's current yield to maturity is 10%. The bond can be sold after 3 months for shs. 352 and the yield to maturity at that time is expected to be 11%.

Calculate the interest elasticity of the bond.

(2mks)

- c) Nation Media Group has issued a 5 year 10% bond with a par value shs. 1,000 selling at shs. 1,200 each. Interest is paid annually. Calculate the duration coefficient of the bond if the required rate of return is 12%. (6mks)
- d) Explain the three theories of yield curve and their effect on interest rates. (6mks)

  (Total 20 marks)

#### **QUESTION FOUR**

- a) With respect to trading in ordinary shares, distinguish between the following terms.
  - (i) Margin trading and short selling

(2mks)

(ii) Secondary market and a secondary offer

(2mks)

b) Kamugu ltd a newly formed company paid an interim dividend for the first six months of its first year of operations of shs. 4 per share. The company expects to pay shs. 8 for the next half year dividend growth rate is expected to be 6% in the first 3 years, 7% in the next 2 years and 8% forever thereafter. Annual risk free rate is estimated to be 8% and the average return on the market portfolio is 12%. If the beta of the company is estimated at 1.45. Determine the value of the share.

(10mks)

c) Explain the roles of Capital Markets Authority (CMA) as participant in the Nairobi Stock Exchange (NSE). (6mks)

(Total 20 marks)