THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157
00200 Nairobi - KENYA
Telephone: 891601-6
Fax: 254-20-891084
E-mail:academics@cuea.edu

MAIN EXAMINATION

JANUARY – APRIL 2014 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

REGULAR PROGRAMME

CFI 421: SECURITY ANALYSIS

Date: APRIL 2014	**Duration: 2 Hours**
INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions	

Q1. a) You are analyzing the following investments:

Investment	A	B	C	D	E
Beta	1.7	0.8	1	2.5	0

The return on the market is 20%. The return on Government bonds is 12% while the return on corporate bonds is 16%.

i) Giving a reason, identify the most risky and least risky investment. **(4 marks)**

ii) Calculate and compare the expected return on the most risky and least risky investment. **(6 marks)**

b) A firm has preference shares outstanding trading at Sh. 114 while their par value is Sh. 100. Investors require a return of 10%. These shares pay dividends at a rate of 11% p.a.

i) If dividends are paid forever, calculate the value per share today. **(3 marks)**

ii) If the shares are redeemable at the end of 12 years what is your advice to an investor holding these shares. **(7 marks)**

c) Company X and Y, generated a net income of Sh. 60m each in the last financial year. Each firm has total assets of Sh. 300m. company X generated a return on equity (ROE) of 15% while firm Y generated a ROE of 18%. What can explain the difference in ROE between the two firms? **(4 marks)**

d) Explain the following terms:

i) Capital markets **(2 marks)**
ii) Short selling **(2 marks)**
iii) Treasury bills **(2 marks)**

Q2. a) A company issued a Sh. 1000, 12 – year bond four years ago. The bonds coupon rate is 18% p.a while the required rate of return is 16% p.a. investors receive interest payments twice a year.

i) Calculate the value of the bond today. **(7 marks)**
ii) What is the highest price you would pay for this bond? **(2 marks)**

b) How much was the bond worth at the time of issue? **(5 marks)**

c) Explain why bonds are called fixed income securities despite having yield to maturities that vary during the bonds life. **(2 marks)**

d) If the bond was issued with collateral, explain how this would affect the bond's value. **(4 marks)**

Q3. You are estimating the value of equity of CIC Ltd, a company that intends to list its shares at the NSE. The information available indicates to the use of the discounted cash flow method (DCF). The firm has debt whose current value is Sh. 12m while its book value is Sh. 10m. The overall cost of capital is 10% while the cost of equity is 14%. The firm's current free cash flow to the firm is Sh. 4m.

Required:

a) Calculate its enterprise value today assuming cash flows remain constant till infinity. **(3 marks)**

b) Assuming that cash flows will grow at 5% p.a. forever calculate its enterprise value today. **(5 marks)**

c) Further, probe shows that cash flows will grow at 18% in the first two ears, 15% in the third year then settle at 6% from year four till infinity.

i) Calculate its enterprise value today. **(6 marks)**

ii) Calculate its equity value today. **(2 marks)**

iii) If it intends to issue 10m shares, what is the value per share? **(2 marks)**

d) Explain any **TWO** reasons for valuing equity. **(2 marks)**

Q4. a) Distinguish between corporate bonds any treasury bonds. **(3 marks)**

b) You are interested in buying a 5 – month put option on the shares of Kibo Ltd. The exercise price of the option is Sh. 100 while the option premium is Sh. 4. The possible price of the share at expiration is either Sh. 90 or Sh. 105.

i) Calculate the gross value if the option is held till expiration. **(5 marks)**

ii) Calculate the net value if the option is held till expiration. **(4 marks)**

iii) Would you buy the option? Explain your answer. **(2 marks)**

c) Explain clearly how the following would affect the put option above:

i) Market price of the underlying asset. **(3 marks)**

ii) Dividends paid by Kibo Ltd. **(3 marks)**

Present value interest factors

1) For a single amount = $(1+r)^{-n}$

2) For an annuity = $\dfrac{1-(1+r)^{-n}}{r}$

END