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KENYATTA UNIVERSITY

SCHOOL OF ECONOMICS

DEPARTMENT OF APPLIED ECONOMICS

EAE 202: FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

SEM 2 2019/2020

INSTRUCTIONS:

Answer question one (compulsory) and any other TWO questions. Question one carries 30 marks and the rest carry 20 marks each.

Question One

a) Classify the following into physical or financial assets. Justify your choice. ~~(10 marks)~~ (2 mks each)
   i) Patents (2 marks)
   ii) Lease obligations (2 marks)
   iii) Customer goodwill (2 marks)
   iv) A college education (2 marks)
   v) A KES500 note (2 marks)

Rephrase - classifying alone cannot be 2 marks, either one explain or justify 1 mark each

b) Discuss the five roles played by financial markets in the economy (10 marks)

c) Classify the following into money or capital market products ~~(10 marks)~~
   i) Repurchase agreements worth KES1,141 (1 mark)
   ii) Small-denomination time deposits and savings deposits worth KES7,202 (1 mark)
   iii) Large-denomination time deposits worth KES1,603 (1 mark)
   iv) Treasury bills worth KES1,478 (1 mark)
   v) Commercial paper worth KES1,445 (1 mark)
   vi) Money market mutual funds worth KES55 (1 mark)
   vii) Treasury notes and bonds worth KES67 (1 mark)
   viii) Eurobonds worth KES54 (1 mark)
   ix) Green bonds KES43 (1 mark)
   x) Preferred shares worth KES2,090 (1 mark)

Question Two

a) In what ways is preferred stock like long-term debt? In what ways is it like equity? (10 marks)

b) Both a call and a put currently are traded on stock XYZ; both have strike prices of KES50 and expirations of 6 months. What will be the profit to an investor who buys the call for KES4 in the following scenarios for stock prices in 6 months? ~~(5 marks)~~
   i) KES40 (1 mark)
   ii) KES45 (1 mark)
   iii) KES50 (1 mark)
   iv) KES55 (1 mark)
   v) KES60 (1 mark)

What's the point of having ~~this~~? The idea see if the student understands the concept. ~~Set~~ rearrange the marks

c) What will be the profit in each scenario in b((i) to (v)) to an investor who buys the put for KES6? (5 marks)

Question Three

a) If you buy 100 shares of East African Breweries stock:
   i) ~~To~~ what are you entitled? to? (5 marks)
   ii) What is the most money you can make on this investment over the next year? (3 marks)
   iii) If you pay KES180 per share, what is the most money you could lose over the year? (3 marks)

b) What are the fundamental factors that determine the level of interest rates in an economy? (3 marks)

c) If the nominal interest rate on a 1-year is 10%, and you expect inflation to be 7.5% over the coming year, calculate the expected real interest rate using:
   i) The approximation formula (2 marks)
   ii) The exact formula (2 marks)
   iii) By how many basis points does the approximation formula overstate the expected interest rate? (2 marks)

Question Four

a) Safaricom's PLC initial public offer was on March 28, 2008 and several agents were involved during this transaction. With the help of a well labelled diagram identify these agents and show how they were linked to the investing public (5 marks)

b) What will be the proceeds and net profits to an investor who purchases the February expiration Standard chartered calls with exercise price KES195 if the stock price at expiration is KES205? (5 marks)

c) ~~What if the stock price at expiration is KES185?~~ (5 marks)

What is the different btw (b) and (c) — they are testing same concept. — delete (c) and set another question

d) Now answer part 4(b) for an investor who purchases a February expiration Standard Chartered put option with exercise price KES195. (5 marks)

Question Five

a) French government bonds, known as OATs (short for Obligations Assimilables du Trésor), pay interest and principal in euros (€). Suppose that in October 2020 you decide to buy €100 face value of the 5% p.a. OAT maturing in October 2025.
   i) What are you entitled from this bond? (4 marks)
   ii) Find the price of this bond if it's yield to maturity today is 2.4% (2 marks) (6 marks)

b) While clearly stating the criteria used compare and contrast a forward and a futures contract (5 marks)

c) Covenants can either be positive or negative. Highlight the specific operating and financial constraints in each category. (5 marks)