CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

CHUKA & EMBU

FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE

BCOM 431: FINANCIAL MANAGEMENT II

STREAMS: BCOM (Y4S1) TIME: 2 HOURS

DAY/DATE: WEDNESDAY 06/12/2017 2.30 P.M. – 4.30 P.M.

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE

(a) Discuss any three implications of efficient market hypothesis to financial decision markers. [6 marks]

(b) Consider a 3 month forward contract on a zero coupon bond with a face value of $1, 000 that is currently quoted at $500, and suppose that the annual risk-free rate is 6%.

Required:

The value of the forward contract [3 marks]

(c) Beta ltd is planning the working capital management for January 2018. The forecast financial information at the start of January 2018 is as follows:

Inventory	sh. 455,000
Trade receivables	sh. 408,350
Trade payables	sh. 186,700

All sales are on credit and they are expected to be sh. 3, 500,000 for 2018. Beta ltd has a gross profit margin of 40%.

Assume that each year has 360 days

Required:

The cash operating cycle of Beta ltd at the start of January 2018. [6 marks]

(d) What is meant by the terms

(i) Put-call parity [2marks]

(ii) Cross hedging [2 marks]

(e) Consider a two year put option with a strike price of ksh 55 on a stock whose current price is sh.50. Suppose there are two time steps of one year and in each time step the stock price moves up by 20% or down by 20%. The risk free rate is 5%.

Required:

Calculate the current value of the put option assuming it is an European option. [8 marks]

(f) Explain the process of marking to market in futures contract. [3 marks]

QUESTION TWO

(a) A plain vanilla interest rate swap was recently advertised in an international journal. The advertisement contained the following details

Period	TB Rate (%)	Period	TB RATE (%)
Current	4.0	180 days	5.0
90 days	4.5	270 days	5.5
180 days	5.0	360 days	6.0

An investor A intends to enter into a Euro: 20, 000,000 quarterly pay plain vanilla interest rate SWAP as a fixed rate payer and the fixed rate is 6% per annum. Another investor B, who is a floating rate payer, is willing to pay 90-day Treasury bill rate + percent margin,A year has 360 days. If A enters into a SWAP contract with B, how much will A pay or receive in 90 days, 270 days and 360 days from now.[6 marks]

(b) Explain the uses of interest rate SWAPs. [4 marks]

(c) Mombasa exporters ltd shares are currently trading on local stock exchange at ksh 350 each. In exactly 15 day time, the company expects to pay a dividend of ksh 4 per share. The company's directors have also approved another dividend of ksh 4 per share to be paid in 105 days. Forecast data indicate that the yield curve is flat and the risk free rate is 5%. Assume a year has 365 days.

Required:

Calculate the no arbitrage forward price for a 100 day forward on the stock.[4 marks]

(d) Explain the following margins as used in futures contract

(i) Initial margin [2 marks]

(ii) Maintenance margin [2 marks]

(ii) Variation margin [2 marks]

QUESTION THREE

(a) Explain the basic option trading strategies, clearly stating the circumstances under which each strategy is applicable. [6 marks]

(b) Briefly explain the approaches that could be used by a company to finance its working capital requirements. [3 marks]

(c) A company has the following information relating to its equity share: current market price per share of kshs. 60, exercise price of kshs. 56, time to maturity of 6 months, variance of 9% and prevailing risk less rate of 14% per annum.

Required:

The value of the option [5 marks]

(d) X Ltd is considering relaxing its credit standards from net 30 days to net 60 days. The current credit sales per annum amount to ksh. 10 terms will increase sales by 10% and bad debts will increase from 3% to 4% of annual credit sales. Debt collection costs will increase from ksh. 20,000 to ksh 100,000. The return on investment in debtors is 20%. Selling price per unit is ksh. 100 and variable cost per unit is ksh 80. Assume a year has 360 days.

Required:

Should the firm change its credit policy. [6 marks]

QUESTION FOUR

(a) Evaluate four differences between a forward contract and a futures contract.[4 marks]

(b) Kena ltd maintains a minimum cash balance of sh. 2, 000,000. The standard deviation of its daily net cash flow at sh. 22,000. The transaction cost of buying and selling of marketable securities is sh. 60 per transaction. The rate of interest for marketable securitiesis 5% per annum. Assume 360 days in a year

Required:

(i) The upper cash limit [2 marks]

(ii) Target cash balance [2 marks]

(iii) Average cash balance [2 marks]

(iv) Spread [2 marks]

(c) The following information is extracted from the books of Shama ltd as at 31st December 2006.

Trade debtors balance (31st December 2006)	sh. 10 million
Trade creditors balance (31st December 2006)	sh. 3 million
Sales for the year	sh. 80 million
Purchases forth year	sh. 60 million
Gross profit margin	25%
Inventory turnover	4.8 times

All sales and purchases were on credit. Assume a year has 360 days

Required:

Calculate the net operating cycle of the firm. [8 marks]
