Machakos University College

(A constituent College of Kenyatta University)

School of Business and Economics

SECOND YEAR FIRST SEMESTER EXAMINATION
FOR BACHELOR OF COMMERCE

BAC 203: BUSINESS FINANCE

Date: 18/8/2014 Time: 2 Hours

Instructions

- **Answer question all questions**

1. a) If a profit maximizing firm operating under perfect competitive conditions faces a market price of Ksh. 500 per unit of its output and has a total cost function given by

   Tc = 100 + 50q2

   Identify its profit maximizing level of output (10 marks)

   b) Your mother has given you a gift on your 18th birthday which is today of Ksh 1000,000. You deposit it in a bank that pays 12% interest compounded annually and you want to withdraw the money when it has doubled. How long will you have to wait . (10 marks)

2. Mr. Kibosho has savings totaling to ksh 1 million which he wishes to invest in shares in three sectors of the economy. Agriculture service and manufacturing. Details on the future economic states, their probabilities of occurrence and the possible return for each of the states are presented below:

Possible future economic state	**Possibility of occurrence**	**Rate of return if state occurs**		
		Shares in Agriculture	Shares in services	Shares in Manufacturing
Recession	0.1	16	14	3
Average	0.4	14	19	5
Boom	0.5	20	22	6

   a) Determine the expected returns associated with investment in each of the sections (6 marks)

b) Determine the risk associated with investment in each of the sectors (hint compute variance, standard deviation and interpret your results) (12 marks)

c) Advice Mr. Kibosho on where to invest his Ksh. 1,000,00 (2 marks)

3. a) The B.com young Brothers ltd (BYB ltd) is expected to pay a divided of Kshs 1.8 at the end of the year. The divided is expected to grow at a rate of 10% thereafter into the foreseeable future. The required rate of return on the stock is 15%. What is the value per share of the company's stock (5 marks)

   b) The Bouncy corporation has issued bonds that have a 10% coupon rate, payable semi-annually. The bonds mature in 8 years and have a face value of Ksh 1000. What is the price of the bonds? (5 marks)

4. The following financial statement are availed to you.

Tanner Company
Income Statement for the Year Ended 30th September 2013

	Shs "000"
Sales	2700
Less cost of sales	1800
Gross profit	900
Less: Operating expenses	624
Net operating income	276
Less: Interest expense	45
Net Income before taxes	231
Less: Income taxes (30%)	69
Net income	162

Tanner Company
Balance Sheet As At 30th September 2013

	Shs "000"
Current Assets	
Cash	80
Accounts receivable	200
Inventory	320
	600
Non- Current Assets	
Plant and Equipment	900
Total assets	1,500
Financed by	
Stock holders equity	
Common stock @ shs 2.50	100
Retained earnings	700

Total stockholders equity	800
Current Liabilities	
Creditors (Discount payable)	250
Debt	
10% Bonds payable	450
Total liabilities and stockholders Equity	1,500

The following additional information is available about the company.

i) The interest expense relates to bonds payable. The amount of bonds outstanding did not change through the year.
ii) There were no issues or retirements of common stock during the year.
iii) Income tax expense has been based on accounting profits
iv) Selected balances at the beginning of the current year (1 October 2012) were

Accounts payable	shs 180,000
Accounts receivable	160,000
Inventory	280,000
Total assets	1200,000

Required:
Compute the following accounting ratios

i) Acid test ratio
ii) Current ratio
iii) Accounts receivable turnover
iv) Average collection period
v) Average payment period
vi) Inventory turnover
vii) Earnings per share
viii) Return on total assets (16 marks)

b) Commend on the performance of Tanner company (4 marks)