(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER

MAIN EXAMINATION

FOR THE DEGREE OFMASTER OF BUSINESS ADMINISTRATION

COURSE CODE: MBA 836E

COURSE TITLE: INVESTMENT AND PORTFOLIO MANAGEMENT

DATE: 16/01/18 **TIME: 2.00 P.M - 4.00 P.M**

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other TWO (2) Questions in Section B

TIME: 3 Hours

KIBUCO observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over.

SECTION A

QUESTION ONE

a) Briefly explain three forms of informationally efficient capital market (6 Marks)

b) Describe the relationship between the price of bonds and:

   i). Interest rates in the market generally (6 Marks)

   ii). Term to maturity of the bonds (6 Marks)

c) Investment management is the process of managing funds in financial and physical investment vehicles. Outline the investment management process (5 Marks)

d) Distinguish between fundamental and technical analysis in equity valuation (4 Marks)

e) Identify any three theories that can explain the term "structure of interest rates" (3 Marks)

SECTION B

QUESTION TWO

a) Sameta Company Ltd. has been enjoying a substantial net cash inflow. Before the surplus funds are needed to meet tax and dividend payments, and to finance further capital expenditure in several months' time, they are invested in a small portfolio of short-term equity investments.Details of the portfolio, which consist of shares of four companies listed on the stock exchange, are as follows:

Company	Number of shares	Beta equity coefficient	Market price per share	Latest dividend yield	Expected return on equity in the next year
			Sh.	%	%
X Ltd	120,000	1.16	42.90	6.1	19.5
Y Ltd	160,000	1.28	29.20	3.4	24.0
W Ltd	200,000	0.90	21.70	5.7	17.5
Z Ltd	250,000	1.50	31.40	3.3	23.0

The current market return is 19% a year and Treasury bill yield is 11% a year.

Required:

i) On the basis of the data given above, calculate the risk of Sameta Company Ltd.'s short-term investment portfolio relative to that of the market. (6 marks)

ii) Explain whether or not Sameta Company Ltd should change the composition of their portfolio (8 Marks)

b) Explain the merits of the Arbitrage Pricing Model (6 Marks)

QUESTION THREE

a) Explain the relationship between a call option price and the following determinants:
   - i). The underlying stock's price (2 Marks)
   - ii). The exercise price (2 Marks)
   - iii). The time to maturity (2 Marks)
   - iv). The risk-free rate (2 Marks)

b) Zawadi Ltd is considering introducing an executive share option scheme. The scheme would be offered to all middle level managers of the company. It would replace the existing scheme of performance bonuses linked to post tax earnings per share of the company. Such bonuses in the last year ranged between Sh.500,000 and Sh.700,000. If the option scheme is introduced new options are expected to be offered to managers each year. It is proposed that for the first year, all middle level managers be offered options to purchase 500, 000 shares at a price of Sh.10.00 per share, after the options have been held for one year. If the options are not exercised at that time they will lapse. The company's shares have a current market price of Sh.15.00 per share. The dividend paid was sh. 0.25 per share, a level that has remained constant for the last three years. Assume the dividends are paid annually. The company's share has experienced a standard deviation of 38% during last year. The short term risk free interest rate is 12% per annum.

   Required:

   Evaluate whether or not the proposed share option scheme is likely to be attractive to middle managers of Zawadi Ltd (8 Marks)

c) When informed of the scheme in (b) above, one middle level manager of Zawadi Ltd stated that he would rather receive put options than call options, as they would be more valuable to him:
   - i) Explain whether or not Zawadi should agree to offer him put options (2 Marks)
   - ii) Is the manager correct in his statement that put options would be more valuable to him? Explain (2 Marks)

QUESTION FOUR

a) The dividend per share of Malezi Limited as at 31 December 2015 was Sh.2.50. The company's financial analyst has predicted that dividends would grow at 20% for five years after which growth would fall to a constant rate of 7%. The analyst has also projected a required rate of return of 10% for the equity market. Mavazi's shares have a similar risk to the typical equity market.

Required:

i) The intrinsic value of shares of Malezi Ltd. as at 31 December 2015. (8 marks)

b) A comparative study of the records of two oil companies, A Ltd. and B Ltd., in terms of their asset composition, capital structure and profitability shows that they have been very similar for the past five years. The only significant difference between the two firms is their dividend policy. A Ltd. maintains a constant dividend per share while B Ltd. maintains a constant dividend pay-out ratio. Relevant data is as follows:

	A Ltd.			B Ltd.		
Year	Earnings Per share	Dividend per share	Price range in stock Exchange	Earnings per share	Dividend per share	Price range in stock exchange
	Sh.	Sh.	Sh.	Sh.	Sh.	Sh.
1996	1.89	0.45	16 – 18	2.05	0.35	11 – 15
1997	1.50	0.45	12 – 15	1.45	0.25	6 – 14
1998	2.00	0.45	14 – 20	2.07	0.36	7 – 16
1999	2.60	0.45	21 – 26	2.55	0.45	15 – 23
2000	3.90	0.45	26 – 40	4.08	0.69	21 – 44

Required:

i). For each company, determine the dividend pay-out ratio and the price – earnings ratio for each of the five years. (4 marks)

ii). B Ltd's management is surprised that the shares of this company have not performed as well as A Ltd's in the stock exchange. What explanation would you offer for this state of affairs? (4 marks)

iii). Comment on the applicability of the Simple Price/Earnings (P/E) ratio to the typical technology (IT) company with a high valuation and heavy losses. (4 marks)

QUESTION FIVE

Uchumi Ltd seeks to invest in Zambezi Hardware Tools Company Limited which sells plumbing fixtures on terms of 2/10 net 30. Its financial statements for the last three years are as follows:

	1998	**1999**	**2000**
	Sh.'000'	**Sh.'000'**	**Sh.'000'**
Cash	30,000	20,000	5,000
Accounts receivable	200,000	260,000	290,000
Inventory	400,000	480,000	600,000
Net fixed assets	800,000	800,000	800,000
	1,430,000	1,560,000	1,695,000
Accounts payable	230,000	300,000	380,000
Accruals	200,000	210,000	225,000
Bank loan, short term	100,000	100,000	140,000
Long term debt	300,000	300,000	300,000
Common stock	100,000	100,000	100,000
Retained earnings	500,000	550,000	550,000
	1,430,000	1,560,000	1,695,000

Additional information:

Sales	4,000,000	4,300,000	3,800,000
Cost of goods sold	3,200,000	3,600,000	3,300,000
Net profit	300,000	200,000	100,000

Required:

(a) For each of the three years, calculate the following ratios:
Acid test ratio, Average collection period, inventory turnover, Total debt/equity, Net profit margin and return on assets. (12 marks)

(b) From the ratios calculated above, comment on the liquidity, profitability and gearing positions of the company. Advise Uchumi Ltd on whether to invest Zambezi Hardware Tools Company Limited (8 marks)