MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BANKING, ACCOUNTING & FINANCE

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF COMMERCE

BAC 308: CORPORATE FINANCE

DATE: 26/7/2019 **TIME: 2.00-4.00 PM**

INSTRUCTIONS: answer question one and any other two questions

QUESTION 1: COMPULSORY (30 MARKS)

a) With the help of a diagram explain an optimum portfolio (5 marks)

b) Explain THREE indicators of financially distressed firm's (3 marks)

c) X Ltd intends to take over Y Ltd by offering two of its shares for every five Shares held in Y Ltd. Financial data is as follows.

	X Ltd **Sh.**	**Y Ltd** **Sh.**
Total earnings	200,000	500,000
No. of shares	100,000	250,000
Market price per share	100	40

Required:

i) Compute the combined EPS and MPS

ii) Has wealth been created for the shareholders? Give your reasons (6 marks)

d) Zuri Investment Ltd currently sells bonds at Sh. 2,500 with a 12% coupon rate at Sh. 2,000 per value. The bond agreement provides for payment of interest on annual basis with 18 years maturity period.

Required: Calculate;

The bond yield to maturity (4 marks)

e) Briefly explain Four types of mergers (8 marks)

f) Highlight four advantages that accrue to an organization that raises funds through short-term bank loans (4 marks)

QUESTION 2 (20 MARKS)

Mabuki has invested 75% of his funds in shares of company X and 25% in shares of company Y. The following probability distribution relates to the shares of the two companies.

State of the economy	**Probability**	**Return on X (%)**	**Return on Y (%)**
Boom	0.2	24	5
Steady growth	0.6	12	30
Slump	0.2	0	-5

Required: Calculate

a) Expected return of shares of companies X and Y (4 marks)

b) Expected portfolio return (3 marks)

c) Standard deviation of returns of shares of companies X and Y (4 marks)

d) Covariance between returns of shares of companies X and Y (3 marks)

e) Coefficient of correlation between the returns on shares of X and Y (3 marks)

f) Portfolio risk (3 marks)

QUESTION 3: (20 MARKS)

a) The following are the financial statements of Panda Ltd for the year ended 30 September 2015.

Income Statement for the for the year ended 30   September 2017

	Sh. “Million”
Revenue	840
Cost of sales	(554)
Gross profit	286
Operating expenses	(186)
Operating profit	100
Finance cost	(6)
Profit before tax	94
Income tax expense	(45)
Profit for the year	49

Statement of financial position as at 30 September   2017

	Sh. “Million”	Sh. “Million”
Non-current Assets		
Tangible assets		176
Intangible assets		36
		212
Current assets		
Inventory	237	
Trade receivables	105	
Bank balance	52	394
Total assets		**606**

EQUITY AND LIABILITIES

Capital and reserves	**Sh. "Million"**	**Sh. "Million"**
Ordinary share capital (sh. 5 each)		100
Retained earnings		299
		399
Non-current liabilities		
Non-current loan		74
Current liabilities		
Trade payables		133
		606

Additional information

1) The Z-score is to be calculated using the following formula.

Z - score = $1.2X_1 + 1.4 X_2 + 3.3 X_3 + 0.6 X_4 + 1.0 X_5$

Whereas

X_1 = Working capital /Total assets

X_2 = Retained earnings/Total assets

X_3 = Earnings before interest and taxes / Total assets

X_4 = Market value of Equity/Book value of debt

X_5 = Sales /Total assets

ii) The current market price per share is Shs. 8

Required:

Calculate the Z-score and comment on the financial risk of the company (12 marks)

b) Explain capital market efficiency and briefly discuss the three levels of efficiency (8 marks)

QUESTION 4: (20 MARKS)

Pata Limited is taking over Kata Ltd. The following information is available for both companies which are quoted on the stock exchange.

	Pata	**Kata**
Net sales	Sh. 600,000	Sh. 250,000
Profit after tax	Sh. 200,000	Sh. 40,000
Number of shares	10,000	5,000
Market price per share	Sh. 60	Sh. 20

Calculate the following for the companies

a) Earnings per share for the two companies (4 marks)

b) Price earning ratio for the two companies (4 marks)

c) Market capitalization for the two companies (4 marks)

d) Number of shares issued to Kata Ltd (2 marks)

e) Earnings per share after the merger and comment on the EPS effect to the shareholders of the two companies (4 marks)

f) Price earning (P/E) ratio after the merger

g) Market capitalization after the merger.

QUESTION 5: (20 MARKS)

a) Briefly explain FIVE assumptions of the Capital Asset Pricing Model (CAPM) (10 marks)

b) Amani Limited has total assets of Sh. 1 billion. Its equity, divided in 25 million outstanding shares, has a market value of Sh. 800 million. Currently the company has debt of Sh. 400 million. The company has just made an issue of debentures (Sh.100 each) of a total amount of Sh. 400 million plus one warrant of Sh. 10 for each debenture. A warrant will entitle the debenture holders to apply for one equity share at an exercise price of Sh. 15 at the end of two years. The annual standard deviation of the share price variability before the debenture issue is 4.5. Assume that the interest rate is 10 percent.

Required: Calculate the value of the w arrant (10 marks)