MACHAKOS UNIVERSITY

University Examinations for 2016/2017 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARMENT OF BANKING, ACCOUNTING & FINANCE

THIRD YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF COMMERCE

BAC 308: CORPORATE FINANCE

DATE: 2/8/2017 **TIME: 8:30 – 10:30 AM**

INSTRUCTIONS

Answer question ONE and any other TWO questions

QUESTION ONE (COMPULSORY) (30 MARKS)

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

(b) Explain THREE indicators of financially distressed firms. (3 marks)

(c) James purchased a video machine a year ago, its value at the beginning and end of the year declined from Ksh.12000 to Ksh.11800. During the year it generated Ksh.1700 of after-tax cash receipts. Calculate the annual rate of return of this video machine (6 marks)

(d) Salama Investment Ltd. Currently sells its bonds at Ksh.2500 with a 12% coupon rate at Ksh.2000 par value. The bond agreement provides for payment of interest on annual basis with 18-year maturity period. Calculate the bond yield to maturity. (4 marks)

(e) Briefly explain FOUR types of mergers. (8 marks)

(f) Comfort Ltd issued warrants whose exercise price is Ksh.40 per common stock. Each warrant can be used to purchase two shares. What is the warrant's theoretical value, when the underlying stocks' market price is Ksh.50 per share? (4 marks)

QUESTION TWO (20 MARKS)

Moto Ltd is taking over Rola Ltd; the following information is available for both companies which are quoted on the stock exchange:

	Moto	Rola
Net sales	Ksh.1,200, 000	Ksh.500, 000
Profit after tax	Ksh.400, 000	Ksh.80, 000
Number of shares	20,000	10,000
Market price per share	Ksh.120	Ksh.40

Calculate the following for the companies:

(a) Earnings per share for the two companies (4 marks)
(b) Price earnings ratio for the two companies. (4 marks)
(c) Market capitalization for the two companies (4 marks)
(d) Number of shares issued to Rola Ltd (2marks)
(e) Earnings per share after the merger and comment on the EPS effect to the shareholders of the two companies. (4 marks)
(f) Price earnings (P/E) ratio after the merger
(g) Market capitalization after the merger

QUESTION THREE (20 MARKS)

XYZ ltd. is considering three possible capital projects for next year. Each project has a 1 year life, and project returns depend on next year's state of the economy.
The estimated rates of return are shown below.

STATE OF THE ECONOMY	PROBABILITY OF OCCURRENCE	RATE OF RETURN A	B	C
Recession	0.25	10%	9%	14%
Average	0.50	14%	13%	12%
BOOM	0.25	16%	18%	10%

REQUIRED:

a) Find each project expected rate of return, variance, standard deviation and coefficient of variation.

b) Compute the correlation coefficient between
   i) A and B
   ii) A and C
   iii) B and C

c) Compute the expected return on a portfolio if the firm invests equal wealth on each asset.

d) Compute the standard deviation of the portfolio. (20 marks)

QUESTION FOUR (20 MARKS)

a) Mergers and acquisitions are extremely difficult. Expected synergy values may not be realized and therefore, the merger is considered a failure. Explain FIVE reasons behind failed mergers. (10 marks)

b) Samala Ltd. Has total assets of Ksh.1 billion. Its equity divided in 25 million outstanding shares, has a market value of Ksh.800 million. Currently the company has debt of Ksh.400 million. The company has just made an issue of debentures Ksh.100 each of a total amount of Ksh.400 million plus one warrant of Ksh.10 for each debenture. A warrant will entitle debenture holders to apply for one equity share at an exercise price of Ksh.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%, calculate the value of the warrant. (10 marks)

QUESTION FIVE (20 MARKS)

(a) Explain the term "capital market efficiency' (2 marks)

(b) Briefly discuss the three levels of market efficiency. (6 marks)

(c) Maassa is considering purchasing debentures of Ksh.100, 000 issued by a company, maturing in 5 years. The interest payable by the company on the dentures is 7%p.a., the appropriate capitalization rate is 5%. Calculate what Maassa should pay now to purchase the debentures if they mature at par value. (12 marks)