TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

UNIVERSITY EXAMINATION FOR:

BACHELOR OF BUSINESS ADMINSTRATION

BFI4410: ISSUES IN FINANCIAL MANAGEMENT

END OF SEMESTER EXAMINATION

SERIES:AUGUST2019

TIME:2HOURS

DATE: Pick DateAug2019

Instructions to Candidates

You should have the following for this examination

-*Answer Booklet, examination pass and student ID*

This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

QUESTION ONE

a)The risk free rate is 10% and the expected return on the market portfolio is 15%. The expected returns for 4 securities are listed below together with their expected betas

SECURITY	EXPECTED RETURN	EXPECTED BETA
A	17.0%	1.3
B	14.5%	0.8
C	15.5%	1.1
D	18.0%	1.7

REQUIRED:

a. On the basis of these expectations, which securities are overvalued? Which are undervalued?

10 Marks

b. If the risk-free rate were to rise to 12% and the expected return on the market portfolio rose to 16%, which securities would be overvalued? which would be under-valued? (Assume the expected returns and the betas remain the same). **10 Marks**

c) Company A is considering the acquisition by shares of Company B. The following information is also available.

	Company A	**Company B**
Present earnings	Shs 20,000,000	Shs 5,000,000
Shares	5,000,000	2,000,000
Earnings per share	Shs 4	Shs 2.50
Price/earning ratio	16	12
Price of shares	Sh 64	Sh 30

Company B has agreed to an offer of Shs 35 a share to be paid in Company A shares.

REQUIRED:

Consider the effect of the acquisition to the earnings per share. **10Marks**

QUESTION TWO

a)Security returns depend on only three risk factors-inflation, industrial production and the aggregate degree of risk aversion. The risk free rate is 8%, the required rate of return on a portfolio with unit sensitivity to inflation and zero-sensitivity to other factors is 13.0%, the required rate of return on a portfolio with unit sensitivity to industrial production and zero sensitivity to inflation and other factors is 10% and the required return on a portfolio with unit sensitivity to the degree of risk aversion and zero sensitivity to other factors is 6%. Security i has betas of 0.9 with the inflation portfolio, 1.2 with the industrial production and-0.7 with risk bearing portfolio—(risk aversion)

Assume also that required rate of return on the market is 15% and stock i has CAPM beta of 1.1

REQUIRED:

Compute security i's required rate of return using

i) CAPM **5Marks**
ii) APT **5Marks**

e)Assume that the risk free rate of return is 8%, the market expected rate of return is 12%. The standard deviation of the market return is 2% while the covariance of return for security A and the market is 2%.

REQUIRED:

i)What is the required rate of return on Security A? **5 Marks**

ii) The Arbitrage Pricing Theory (APT) is much more robust than the capital asset pricing model for several reasons, Discus. **5Marks**

QUESTION THREE

Highlands Dairy is considering investing in a new milk cooling system with the following characteristics:

A	Initial investment:	Sh 7,360,000 no scrap value
B	Expected economic life:	5 years
C	Sales Volume:	1,120,000 litres per annum
D	Selling price:	Sh 15 per litre
E	Variable Costs:	Sh 11 per litre
F	Fixed costs excluding depreciation	Sh 1,628,000 per annum

The company's hurdle rate is 15% and uses straight line method of depreciation. Its marginal tax rate is 40%.

Required:

(a) Calculate the project's internal rate of return (IRR). (5 marks)

(b) Recalculate the IRR assuming each of the characteristics A, C, D and E above, in isolation, varies adversely by 10%. (Round your IRR to the nearest whole percentage). (15marks

QUESTION FOUR

XYZ Ltd. is considered acquiring ABC Ltd. The following information relates to ABC Ltd. for the next five years. The projected financial data are for the post-merger period. The corporate tax rate is 40% for both companies.

Amounts are in Shs `000'

	1994	1995	1996	1997	1998
Net sales	1,050	1,260	1,510	1,740	1,910
Cost of sales	735	882	1,057	1,218	1,337
Selling & admn. expenses	100	120	130	150	160
Interest expenses	40	50	70	90	110

Other information

a. After the fifth year the cashflows available to XYZ from ABC is expected to grow by 10% per annum in perpetuity.

b. ABC will retain Shs 40,000 for internal expansion every year.

c. The cost of capital can be assumed to be 18%.

REQUIRED:

i. Estimate the annual cash flows.

ii. Determine the maximum amount XYZ would be willing to acquire ABC at.

QUSTION FIVE

Due diligence must be aggressive, collecting as much information as possible about the target company. This may even require some undercover work, such as sending out people with false identities to confirm critical issues. A lot of information must be collected in order for due diligence to work. Write short notes.