KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2020/2021

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (REAL ESTATES)

BRE 307: REAL ESTATE FINANCE

DATE: THURSDAY 1ST APRIL 2021 TIME: 11.00 A.M. – 1.00 P.M.

INSTRUCTIONS
Answer Question One and any other Two questions

QUESTION ONE

a) In reference to real estate finance define the following
   i. The efficient frontier
   ii. Risk aversion
   iii. Systematic Risk (6 marks)

b) Highlight the Key requirements of Construction Financing (6 marks)

c) Discuss any two Theories of Capital structure (5 marks)

d) You have been provided with the following information of a multifamily property located in Kiambu Road. The property is a 100 unit garden apartment complex. The current purchase price is KES 4,000,000 (or KES 40,000 per unit). In addition, the property will initially require KES 850,000 in capital expenditures. When the repairs are completed, the property will provide gross rental revenues according to the rent roll listed below.

	No of units	Average SQF	Average rent/PSF per month
1 Bedroom	40	600	600
2 Bedroom	60	1000	950

The property will also provide KES 10,000 in non-rental income during the first year of operations. Vacancy losses are 4% of gross rental revenue, loss to leases and collection losses each amount to 2% of Gross Rentals. The first year's variable expenses include general administration KES 25,000, Payroll and Burden 20000, Building services , service fees 24000, Property taes 30000.Capital expenditures amount to KES 850,000. The future expected selling price is estimated by capitalizing the property's year 4 NOI at 10%. The investor will have to pay a 2% commission when the property is sold.T he acquisition will be financed with a loan for 75% of the purchase price at 9.0% interest with monthly payments for 25 years. The investor's ordinary income is taxed at the 36% marginal rate and capital gain income is taxed at the statutory ceiling rate of 28%.

Calculate

i. Afrtertax cash flow from Operations (8 Marks)
ii. After tax cash flow from reversion (5 Marks)

QUESTION TWO

a) Discuss the real estate Cycle explaining the occupancy rates in each Stage (3 marks)

b) A property is expected to produce a rent of KES 1,000 pa for 3 years followed by KES 1,500 for the following 3 years followed by KES 2,000 pa for the final 3 years of a 9 year lease. The rents are paid annually in arrears. Use a yield of 8% to discount the rents. Calculate the value of this Property (6 marks)

e) You would like to buy a house worth Kshs 6,000,000 and are considering two different lenders. The first is offering an 90 % LTV, fixed-rate mortgage at 12 % interest, amortized over 25 years. The lender will charge one point on this loan, which will be paid out of the borrower's pocket. The second is offering a 80 % LTV, fixed rate mortgage at 15 % interest, amortized over 20 years; this loan requires the borrower to pay 2 points. Your expected holding period is 10years.

Calculate

i. The effective borrowing cost of each of these two mortgages. (6 marks)

ii. The incremental borrowing cost associated with the extra funds received from the second loan. (4 marks)

iii. Based on your calculations, explain how you might decide which lender to choose. On what would your answer depend? (2 mark)

QUESTION THREE

a) Briefly differentiate between Asset Pricing Model and Capital asset pricing Model (6 marks)

b) Explain the advantages of Real estate Investment trust as a source of Equity Financing (4 marks)

c) Brad Real Estate Company, an unquoted manufacturing company, has been experiencing a growth in demand, and this trend is expected to continue. In order to cope with the growth in demand, the company needs to buy further machinery and this is expected to cost 30% of the current company value. In the past, a high proportion of earnings has been distributed by way of dividends so few cash reserves are available. 51% of the shares in Brad Real Estate Company are still owned by the founding family. A decision must now be taken about how to raise the funds. The firm has already raised some loan finance and this is secured against the company land and buildings.

Required:

Suggest the issues that should be considered by the board in determining whether debt would be an appropriate source of finance. (10 Marks)

QUESTION FOUR

a) Define Secondary mortgage market and explain three reasons why it's important in Kenya (8 marks)

b) Fixed rate Mortgage has been associated with the tilt problem and is prone to interest rate risk, especially in light of the short-term nature of traditional lenders' deposit base. As a result several alternative mortgage instruments were developed. Discuss any FOUR types of alternative mortgage instrument that were developed to solve this risk and tilt problem, Stating one advantage and disadvantage of each instrument.

(12 marks)

QUESTION FIVE

a) Consider a loan with a KES 150,000 initial balance, a 30-year (360 month) life, and monthly payments. The first-year's monthly payment is computed with a 6.25% APR "teaser" rate, The interest rate cap allows the rate to rise by no more than 200 basis points per year, or 600 basis points over life of loan. Compute the the payment that applies to every month in the first year and Second Year. (5 marks)

b) Consider a loan with a KES 150,000 initial balance, 30-year (360 month) life, and monthly payments. The interest rate for the first 7 years is a stated annual 8.4. The cap restricts the rate from ever rising by more than 500 basis points. Calculate the

   i) The payment that applies to every month in the first 7 years is (2 marks)

   ii) The monthly payment in the eighth year, if the interest rate rises to a 10.5%N (3 Marks)

c) Mongoria Realtors intends to take a loan from Kenya Standard chartered bank to Finance construction of Maendeleo Mall in Laikipia north, Kenya. Outline five regulatory charges on a commercial mortgage loan. (10 marks)