



KENYATTA UNIVERSITY
EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN REAL ESTATE
MANAGEMENT

BRE 307: REAL ESTATE FINANCE

1ST SEMESTER 2021/2022

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO.

QUESTION ONE

- a) Discuss the Modern Portfolio Theory (5 marks)
- b) Define Foreclosure and using appropriate examples explain any three alternative work outs (7marks)
- c) Discuss any two theories of Capital structure applicable in real estate investment (6 marks)
- d) You would like to buy a house worth Kshs 2,000,000 and are considering two different lenders. The first is offering a 90 % LTV, fixed-rate mortgage at 15 % interest, amortized over 15 years. The lender will charge one point on this loan. The second is offering a 65 % LTV, fixed rate mortgage at 16 % interest, amortized over 30 years; this loan requires the borrower to pay 2 points. Your expected holding period is 5 years.
 - i. Calculate the effective borrowing cost of each of these two mortgages. (6 marks)
 - ii. Calculate 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. (3 marks)

QUESTION TWO

- a) Explain the advantages of Real estate Investment trust as a source of Equity Financing (6 marks)
- b) You have been provided with the following information of a multifamily property located in Kiambu Road. The current purchase price is KES 66,000,000. In addition, the property will initially require KES 1,000,000 in capital expenditures. When the repairs are completed, the property will provide gross rental revenues of KES 300,000 per Month. The property will also provide KES 10,000 in non-rental per month income during the first year of operations. Vacancy losses amount to 5.5 % of gross rental revenue, loss to leases and collection losses each amount to 2% of Gross Rentals. The Monthly variable expenses for the first year include general administration KES 25,000 per month, Payroll and Burden 20,000; Building services KES 24, 000, Property Rates KES 30000. 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. The 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. Aftertax cash flow from Operations (9 Marks)
- ii. After tax cash flow from reversion (5 Marks)

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION

QUESTION THREE

- a) Briefly differentiate between
- Speculation and Investment (2 Marks)
 - Over the Counter Vs Organised Exchange (2 marks)
 - Share appreciation and Price Level Adjustable Mortgage (4 Marks)
 - Asset Pricing Model and Capital asset pricing Model (4 marks)
 - Financial and Operational Leverage (4 marks)
 - Participating and Mezzanine Mortgage loans (4 Marks)

QUESTION FOUR

- a) Define Secondary mortgage market and explain three reasons why it's important in Kenya (5 marks)
- b) An investor has projected three possible scenarios for a project as follows:
- Pessimistic*—*NOI* will be \$200,000 the first year, and then decrease 2 percent per year over a five-year holding period. The property will sell for \$1.8 million after five years.
 - Most likely*—*NOI* will be level at \$200,000 per year for the next five years (level *NOI*) and the property will sell for \$2 million.
 - Optimistic*—*NOI* will be \$200,000 the first year and increase 3 percent per year over a five-year holding period. The property will then sell for \$2.2 million.
 - The asking price for the property is \$2 million. The investor thinks there is about a 30 percent probability for the pessimistic scenario, a 40 percent probability for the most likely scenario, and a 30 percent probability for the optimistic scenario.

Required

- Compute the *IRR* for each scenario. (6 Marks)
- Compute the expected *IRR*. (3 Marks)
- Compute the standard deviation of the *IRRs*. (6 marks)

QUESTION FIVE

- a) Using relevant examples, in commercial lending situations, discuss any five material notifications that may affect the value of the leveraged property that the lender may require. (10 Marks)
- 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, 25-year, 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
- The payment that applies to every month in the first 7 years is (2 marks)
 - The monthly payment in the eighth year, if the interest rate rises to a 10.5%N (3 Marks)