# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY <br> FACULTY OF COMMERCE <br> DEPARTMENT OF FINANCE <br> BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE <br> PART IV $-2^{\text {ND }}$ SEMESTER FINAL EXAMINATION -AUGUST 2009 <br> REAL ESTATE FINANCE [CFI 4205] <br> TIME ALLOWED: 3 HOURS 

## INSTRUCTIONS

Answer sections A and any three questions in Section B.

## SECTION A

1) Four years ago you took out a $\$ 2$ million commercial mortgage at 7.75 percent interest with a 20-year loan term. Current market rates for a similar loan are now 7.00 percent. How large of a fee (prepayment penalty) must the lender charge to maintain his yield if you were to refinance today?
2) Zpex Properties has entered into a purchase agreement on a Class A shopping center in suburban Kansas City. Projected first-year NOI for this center will be \$637,500, with a $\$ 7.5$ million purchase price.

Zpex is seeking financing from Friendly Bank, which will provide 25-year financing at 7.75 percent interest with a maximum loan-to-value ratio of 80 percent and a minimum debt coverage ratio of 1.25 .

Based on this information, what is the maximum loan amount Friendly Bank will offer on this building?
3) An investor would like to finance a project costing $\$ 2$ million with a 70 percent, 25year loan at 7.75 percent interest. The lender's required debt coverage ratio is 1.25 . The project's projected first year NOI is expected to be $\$ 210,000$.
a) Based on this information, what is the largest loan the lender will provide? [3]
b) Briefly describe other factors the lender will consider in underwriting this loan.[6]
4) Mammoth Investments has entered into a purchase agreement on a Class A office building in suburban Denver. Projected first-year NOI for this building will be $\$ 520,000$, with a $\$ 6.5$ million purchase price.

Mammoth is seeking financing from OmniBank, which will provide a 75\% LTV loan with an 8.50 percent interest rate, and a 25 -year amortization schedule.
a) At what cap rate is Mammoth purchasing this property?
b) What will be the annual debt service on this loan? What is the debt-coverage ratio?
c) If OmniBank requires a minimum 1.2 debt-coverage ratio, what is the largest loan they will provide Prell on this property?
d) List three other factors OmniBank will likely consider in deciding whether to approve Mammoth's loan.

## SECTION B

5) Explain how Real Estate Financing differs from Business Financing
6) Distinguish Securitisation from traditional Financing. Is the difference skin-deep or surfacial?
7) Explain how `title’ is important to both buyers and sellers of real estate and to lenders
[20]
8) Prepayment models try to project the pre-payment behaviour of Mortgage loans overtime. How useful is such an exercise?
