MGMT 170 - Real Estate Finance and Investments
Professor Mark S. Karlan
FINAL EXAM PRACTICE QUESTIONS
Spring 2022

1) A 200,000 square foot Best Buy anchored shopping center in suburban Chicago, Illinois that was purchased in January 2020 for $50 million was producing an annual NOI of $3,000,000 at the time of acquisition. Purchase money financing was obtained from CIBC Bank at a 60% LTV ratio and a 5.75% annual interest rate payable monthly and fully amortized over 30 years. What was the acquisition cap rate?
(A) 15.0%
(B) 10.0%
(C) 6.0%
(D) 4.0%

2) A property investor wanted to acquire a 100,000 square foot industrial building in Portland, Oregon for $60 per square foot. JP Morgan Chase committed to fund a 30-year fixed rate purchase money mortgage at an annual interest rate of 5.25% with a maximum LTV of 70%. What is the minimum amount of equity needed to close the acquisition?
(A) $6,000,000
(B) $4,200,000
(C) $3,000,000
(D) $1,800,000

3) A 36-unit apartment building in McLean, Virginia is expected to appreciate in value at a rate of 10% per year. If the owner borrows at an LTV of 80% interest-only and the property's NOI exactly covers the monthly mortgage payments, what would be the expected annual appreciation rate on invested equity?
(A) 10%
(B) 20%
(C) 50%
(D) 75%

4) A 26-unit apartment building in North Hollywood was purchased for $10,000,000 at a cap rate of 3.75% with a 75% LTV interest-only 7-year mortgage loan at a 3.5% annual interest rate. If the owner paid the monthly mortgage payments on time, and if after five years the property appreciated by 40%, what would be the amount of the owner's equity in the property at that time?
(A) $2,500,000
(B) $4,000,000
(C) $6,500,000
(D) $10,000,000

5) If a lender required a minimum 1.4 DSCR for a mortgage loan on a property you wanted to buy, and if the annual net operating income of that property was $70,000, what would be the maximum amount of annual debt service that the lender would allow?
(A) $30,000
(B) $50,000
(C) $60,000
(D) $98,000

6) An apartment investor from Southern California decided to buy a 72-unit apartment building in Columbus, Ohio for $9.0 million and fund the acquisition with a $1.5 million cash down payment and a $7.5 million 25-year fully amortizing fixed rate mortgage loan from Bank of America at an annual interest rate of 4.75% payable monthly. What would be the monthly payment of principal and interest?
(A) $29,687.50
(B) $39,123.55
(C) $42,758.80
(D) $51,310.56

7) An apartment investor from Southern California decided to buy a 72-unit apartment building in Columbus, Ohio for $9.0 million and fund the acquisition with a $1.5 million cash down payment and a $7.5 million 25-year fully amortizing fixed rate mortgage loan from Bank of America at an annual interest rate of 4.75% payable monthly. What portion of the first monthly payment would be principal?
(A) $9,436.05
(B) $13,071.30
(C) $15,685.56
(D) $29,687.50

8) A home buyer acquired a brand new 5,400 square foot 5-bedroom, 4-bathroom home in Glendale, California for $4 million. To lock in the low current interest rates for as long as possible, she financed the purchase with a 30-year fully amortizing fixed rate mortgage loan for $3.6 million with an annual interest rate of 4.25% payable monthly and no prepayment penalty. If she wants to pay off the loan after 8 years, what would be the payoff amount?
(A) $0
(B) $1,439,132
(C) $3,034,083
(D) $3,600,000

9) A shopping center investor is in escrow to purchase a large retail property in Dayton, Ohio for $36,000,000 and is offered two loan alternatives by his preferred lender. The first is a 70% LTV fully amortizing mortgage loan for 25 years at a 6% annual interest rate payable monthly and the second is a 75% LTV fully amortizing mortgage loan for 25 years at a 6.6% annual interest rate payable monthly. If the loan will be held to maturity, what is the incremental borrowing cost on the extra 5% borrowed for the 75% LTV loan?
(A) 6.0%
(B) 6.6%
(C) 14.0%
(D) 15.0%

10) An LLC differs from a limited partnership primarily because:
(A) In an LLC, all members will have limited liability whereas in a limited partnership at least one of the partners will have unlimited liability
(B) In an LLC, at least one of the members will have unlimited liability whereas in a limited partnership all of the partners will have limited liability
(C) In an LLC, all members will have limited liability whereas in a limited partnership all of the partners will have unlimited liability
(D) In an LLC, all members will have unlimited liability whereas in a limited partnership all of the partners will have limited liability

11) A borrower who was in default on a mortgage loan entered into discussions with his lender to negotiate a workout of the loan agreement. Which one of the following concessions would likely be most acceptable to the lender?
(A) Permanently reducing the interest rate on the loan
(B) Forgiving repayment of part of the outstanding principal balance of the loan
(C) Allowing the borrower to not make any monthly payments for a while
(D) Temporarily reducing the interest rate on the loan

12) A residential home buyer acquired a 3-bedroom, 3-bathroom 1,800 square foot condominium in Santa Monica, California for $1,500,000 and financed the purchase with a 30-year fully amortizing fixed rate mortgage loan in the amount of $1,200,000 from online lender Rocket Mortgage at an annual interest rate of 4.125% with no points or loan fees charged. What would be the required monthly payment on the loan?
(A) $4,125.00
(B) $5,156.25
(C) $5,815.80
(D) $7,269.75

13) A residential home buyer acquired a 3-bedroom, 3-bathroom 1,800 square foot condominium in Santa Monica, California for $1,500,000 and financed the purchase with a 30-year fully amortizing fixed rate mortgage loan in the amount of $1,200,000 from online lender Rocket Mortgage at an annual interest rate of 4.125% with no points or loan fees charged. What would be the APR on the loan?
(A) 4.034%
(B) 4.125%
(C) 4.201%
(D) 4.218%

14) A residential home buyer acquired a 3-bedroom, 3-bathroom 1,800 square foot condominium in Santa Monica, California for $1,500,000 and financed the purchase with a 30-year fully amortizing fixed rate mortgage loan in the amount of $1,200,000 from online lender Rocket Mortgage at an annual interest rate of 4.125%. If the lender charged one point as a loan origination fee and $1,200.00 as a property appraisal fee, what would be the APR on the loan?
(A) 4.034%
(B) 4.125%
(C) 4.201%
(D) 4.218%

15) A residential home buyer acquired a 3-bedroom, 3-bathroom 1,800 square foot condominium in Santa Monica, California for $1,500,000 and financed the purchase with a 30-year fully amortizing fixed rate mortgage loan in the amount of $1,200,000 from online lender Rocket Mortgage at an annual interest rate of 4.125% with no points or loan fees charged. If the maturity date of the loan was ten years, what would be the principal balance of the loan on the maturity date?
(A) $949,383
(B) $1,186,728
(C) $1,200,000
(D) $1,288,880

16) You are in escrow to buy a four-bedroom, three-bathroom single family house in Irvine, California for $1,200,000. You have a choice of two 30-year fixed-rate fully amortizing mortgage loans with monthly payments: (A) if you make a 10% down payment, you can obtain a loan with a 6% annual interest rate, or (B) if you make a 20% down payment, you can obtain a loan with a 5% annual interest rate. What is the incremental annual borrowing cost on the additional amount borrowed if you take the higher LTV loan?
(A) 5.0%
(B) 6.0%
(C) 12.9%
(D) 14.0%

17) A shopping center owner refinanced one of her retail buildings in San Jose, California with a 10-year interest-only adjustable rate mortgage loan from Citibank for $18,000,000. The loan index was the 1-year LIBOR rate and the margin was 2.25%. The loan had a “teaser” rate of 1.5% for the first two years, then the loan rate reset annually with 2% annual and 6% lifetime interest rate increase caps. At the time the loan was made, the 1-year LIBOR rate was 1.0%. What would be the balloon payment due on the loan if the monthly payments were all made on time and the loan was paid off on the maturity date?
(A) $0
(B) $14,782,941
(C) $17,035,285
(D) $18,000,000

18) A shopping center owner refinanced one of her retail buildings in San Jose, California with a 10-year interest-only adjustable rate mortgage loan from Citibank for $18,000,000. The loan index was the 1-year LIBOR rate and the margin was 2.25%. The loan had a “teaser” rate of 1.5% for the first two years, then the loan rate reset annually with 2% annual and 6% lifetime interest rate increase caps. At the time the loan was made, the 1-year LIBOR rate was 1.0%. What would be the monthly payment for the first two years of the loan?
(A) $22,500
(B) $33,750
(C) $48,760
(D) $62,122

19) A shopping center owner refinanced one of her retail buildings in San Jose, California with a 10-year interest-only adjustable rate mortgage loan from Citibank for $18,000,000. The loan index was the 1-year LIBOR rate and the margin was 2.25%. The loan had a “teaser” rate of 1.5% for the first two years, then the loan rate reset annually with 2% annual and 6% lifetime interest rate increase caps. On the first reset date, the 1-year LIBOR rate was 3.0%. What would be the monthly payment for the third loan year?
(A) $22,500
(B) $45,000
(C) $52,500
(D) $78,750

20) REITs must comply with a number of federal tax law requirements or they will be taxed at the entity level. Legal entities that do not have to pay tax at the entity level are called:
(A) Corporations
(B) Pass-through entities
(C) Special purpose vehicles
(D) Joint ventures

21) A California LLC operating agreement provides that upon the sale of the property that is owned by the LLC the net cash proceeds are to be distributed first to Mr. Ferguson in an amount equal to his original investment less any cash distributions he previously received, then split 60-40 between Mr. Ferguson and Mr. Price respectively. If the net cash proceeds from the sale of the property are $1,500,000, how much would Mr. Ferguson receive upon the sale of the property if his initial investment was $600,000 and if he had previously received $100,000 in total cash distributions?
(A) $1,100,000
(B) $600,000
(C) $540,000
(D) $400,000

22) A 78-year-old widow in Newton, Massachusetts needs to supplement her retirement income and was advised to take out a reverse annuity mortgage against her home. She and her late husband had acquired their home almost forty years ago, and they had completely paid off their home loan so that the home was now free and clear of mortgage debt. She wanted the RAM loan to provide her with monthly payments to be received over the next 15 years. If her home recently appraised for $2,500,000 and if the RAM lender would allow the loan to grow to a maximum of 90% of the recent appraised amount at the end of 15 years, and if the annual interest rate on the RAM loan was to be 5.5%, what would be the maximum monthly payment that the widow could receive?
(A) $8,071.88
(B) $8,968.75
(C) $18,384.38
(D) $20,427.09

23) An apartment building owner refinanced one of her apartment buildings in Cupertino, California with a 30-year fully amortizing ARM loan from Citibank for $18,000,000. The loan index was the 1-year LIBOR rate and the margin was 2.25%. The loan had a “teaser” rate of 1.5% for the first two years, then the loan rate reset annually with 2% annual and 6% lifetime interest rate increase caps. On the first reset date, the 1-year LIBOR rate was 3.0%. What would be the monthly payment for the first two years of the loan?
(A) $22,500
(B) $62,122
(C) $68,804
(D) $75,888

24) An apartment building owner refinanced one of her apartment buildings in Cupertino, California with a 30-year fully amortizing ARM loan from Citibank for $18,000,000. The loan index was the 1-year LIBOR rate and the margin was 2.25%. The loan had a “teaser” rate of 1.5% for the first two years, then the loan rate reset annually with 2% annual and 6% lifetime interest rate increase caps. On the first reset date, the 1-year LIBOR rate was 3.0%. What would be the monthly payment for the third loan year?
(A) $25,000
(B) $62,122
(C) $79,606
(D) $96,875

25) A particularly desirable office building development site near the Santa Monica Pier is a 60' by 200' rectangular lot. If the local zoning codes require that the building's footprint be set back ten feet from each side of the property line, and if the FAR for that site is 3.0 per square foot of the building's footprint, what is the maximum building square footage that can be built?
(A) 7,200
(B) 12,000
(C) 21,600
(D) 36,000

26) A 100,000 square foot office building in Oakland, California is fully leased to a single tenant at $30.00 PSF per year. The building's expenses total $7.50 PSF per year and an expense stop in all the leases is set at $6.00 PSF per year. What is the total annual expense amount paid by the landlord?
(A) $750,000
(B) $600,000
(C) $150,000
(D) $0

27) A 100,000 square foot office building in Oakland, California is fully leased to a single tenant at $30.00 PSF per year. The building's expenses total $7.50 PSF per year and an expense stop in all the leases is set at $6.00 PSF per year. What is the total annual expense amount paid by the tenant?
(A) $750,000
(B) $600,000
(C) $150,000
(D) $0

28) A 100,000 square foot office building in Oakland, California is fully leased to a single tenant at $30.00 PSF per year. The building's expenses total $7.50 PSF per year and an expense stop in all the leases is set at $6.00 PSF per year. What is the annual net operating income to the owner?
(A) $3,000,000
(B) $2,400,000
(C) $2,250,000
(D) $150,000

29) The limited liability company is the preferred investment vehicle for real estate because:
(A) No member of the LLC will have unlimited liability
(B) In some states, even single member LLCs are permitted
(C) Decision-making can be delegated to a third party who is not a member of the LLC
(D) All the above are correct

30) In the event of a foreclosure of a real property investment by a first mortgage lender, a second mortgage lender with a non-recourse loan will:
(A) Lose the security of its real estate mortgage but have the right to sue the borrower for repayment of the outstanding loan balance
(B) Retain the security of its real estate mortgage and have the right to sue the borrower for repayment of the outstanding loan balance
(C) Lose the security of its real estate mortgage and not have the right to sue the borrower for repayment of the outstanding loan balance
(D) Retain the security of its real estate mortgage but not have the right to sue the borrower for repayment of the outstanding loan balance

31) Which of the following types of deed gives a buyer of real estate the strongest title protection:
(A) Special warranty deed
(B) General warranty deed
(C) Quitclaim deed
(D) Deed of trust

32) An investment with a compound annual rate of return of 9% will double in value in approximately how many years?
(A) 8
(B) 9
(C) 10
(D) 11

33) A 39,000 square foot, single tenant fully leased office building in Topeka, Kansas was purchased for $7,800,000. The tenant had a 10-year lease at a flat rental rate of $2.00 per square foot per month with an operating expense stop of $0.70 per square foot per month. The building’s first-year annual operating expenses totaled $360,000. The property was acquired with a $5,000,000 purchase money mortgage loan from Bank of America at a 4.75% annual interest rate that fully amortized over 30 years and was payable monthly. The building/land ratio for tax depreciation purposes was 80%. What was the net operating income to the landlord for the first year?
(A) $936,000
(B) $608,400
(C) $576,000
(D) $295,412

34) A 39,000 square foot, single tenant fully leased office building in Topeka, Kansas was purchased for $7,800,000. The tenant had a 10-year lease at a flat rental rate of $2.00 per square foot per month with an operating expense stop of $0.70 per square foot per month. The building’s first-year annual operating expenses totaled $360,000. The property was acquired with a $5,000,000 purchase money mortgage loan from Bank of America at a 4.75% annual interest rate that fully amortized over 30 years and was payable monthly. The building/land ratio for tax depreciation purposes was 80%. What was the before tax cash flow to the landlord for the first year?
(A) $936,000
(B) $608,400
(C) $576,000
(D) $295,412

35) A 39,000 square foot, single tenant fully leased office building in Topeka, Kansas was purchased for $7,800,000. The tenant had a 10-year lease at a flat rental rate of $2.00 per square foot per month with an operating expense stop of $0.70 per square foot per month. The building’s first-year annual operating expenses totaled $360,000. The property was acquired with a $5,000,000 purchase money mortgage loan from Bank of America at a 4.75% annual interest rate that fully amortized over 30 years and was payable monthly. The building/land ratio for tax depreciation purposes was 80%. What was the tax depreciation for the first year?
(A) $283,636
(B) $226,909
(C) $200,000
(D) $160,000

36) A 39,000 square foot, single tenant fully leased office building in Topeka, Kansas was purchased for $7,800,000. The tenant had a 10-year lease at a flat rental rate of $2.00 per square foot per month with an operating expense stop of $0.70 per square foot per month. The building's first-year annual operating expenses totaled $360,000. The property was acquired with a $5,000,000 purchase money mortgage loan from Bank of America at a 4.75% annual interest rate that fully amortized over 30 years and was payable monthly. The building/land ratio for tax depreciation purposes was 80%. What was the taxable income for the first year?
(A) $608,400
(B) $448,400
(C) $372,565
(D) $212,565

37) A constant amortization mortgage is not typically available in the mortgage lending business because when it is compared to a constant payment mortgage with the same principal amount, interest rate and amortization period, the constant amortization mortgage will have:
(A) Lower monthly payments during the early years of the loan and more total interest paid over the life of the loan
(B) Higher monthly payments during the early years of the loan and less total interest paid over the life of the loan
(C) Lower monthly payments during the early years of the loan and less total interest paid over the life of the loan
(D) Higher monthly payments during the early years of the loan and more total interest paid over the life of the loan

38) A portfolio of investments whose individual expected returns are not highly correlated:
(A) Will provide a significant diversification benefit and lower the risk of the portfolio
(B) Will provide a significant diversification benefit and raise the risk of the portfolio
(C) Will not provide a significant diversification benefit and will raise the risk of the portfolio
(D) Will not provide a significant diversification benefit but will lower the risk of the portfolio

39) A sale-leaseback transaction might be used by a corporate owner of highly appreciated real estate assets in order to:
(A) Pay monthly rent to the new owner of those properties
(B) Obtain significant liquidity from the sale of those appreciated properties
(C) Pay capital gain taxes on the significant appreciation in the value of the properties
(D) Lose the future appreciation in the value of the real estate

40) All of the following are among the reasons why real estate development is the riskiest aspect of the real estate business, EXCEPT:
(A) Development projects can be significantly affected by construction delays and cost overruns
(B) Construction loans are typically recourse to the developer
(C) Market conditions at the time of construction completion might be much worse than originally projected
(D) Tenant demand and rent levels will typically be higher for well designed, newly built real estate projects as compared to older projects in the same areas

41) When a real estate investor borrowed $6.6 million from a local bank for a 66,000 square foot shopping center acquisition in El Segundo, California, the borrower signed two documents to evidence the loan and security agreement. They were:
(A) A note and a grant deed
(B) A deed of trust and an abstract of title
(C) An escrow agreement and a loan agreement
(D) A promissory note and a deed of trust

42) "Conforming" mortgage loans conform to the current loan underwriting guidelines of:
(A) The Federal Reserve System
(B) GAAP
(C) Fannie Mae and Freddie Mac
(D) Ginnie Mae

43) An appraisal of a single-family residence will primarily rely on which appraisal method:
(A) Comparable sales
(B) Capitalization of income
(C) Replacement cost
(D) Abstract of title

44) When a shopping center owner received a $10 million offer to buy her property that was now free and clear of any mortgage debt, she was delighted but did not want to pay the substantial capital gain taxes on the sale given her very low cost basis of the property given that she had acquired the property 25 years ago at a price of $1.8 million. She might:
(A) Sell the shopping center for $10 million and buy another shopping center for $20 million with a new 50% LTV first mortgage loan in a Section 1031 exchange
(B) Sell the property in a transaction that uses the installment sale method whereby she would receive the sale proceeds over a period of several years
(C) Keep the property and put a new 65% LTV mortgage loan on the property and enjoy the $6.5 million of cash proceeds from the financing without paying any taxes on the amount borrowed
(D) All of these answers are correct

45) Rising interest rates will tend to:
(A) Increase cap rates and increase property values
(B) Reduce cap rates and increase property values
(C) Increase cap rates and reduce property values
(D) Reduce cap rates and reduce property values

46) A triple net lease generally requires the tenant to pay all of the following, EXCEPT:
(A) Annual property taxes
(B) Building insurance
(C) Repairs and maintenance
(D) Mortgage loan payments

47) Publicly listed real estate investment trusts typically pay higher dividend yields than other publicly traded stocks because in order to qualify as a REIT and avoid paying entity level tax under federal tax law, a REIT:
(A) Must pay out at least 75% of its NOI as dividends
(B) Must have at least 20% of its assets in taxable REIT subsidiaries
(C) Must have at least 95% of its assets in real estate related securities
(D) Must pay out at least 90% of its taxable income as dividends

48) Under current tax laws, real estate owners can depreciate real property over either 27.5 or 39 years straight line, depending on the type of investment property. Tax depreciation is a benefit for real estate owners because it:
(A) Reduces taxable income thereby increasing the income tax payable
(B) Increases taxable income thereby increasing the income tax payable
(C) Reduces taxable income thereby reducing the income tax payable
(D) Increases taxable income thereby reducing the income tax payable

49) Fannie Mae and Freddie Mac are the key players in the U.S. secondary mortgage market, and together they buy almost half of all:
(A) Residential mortgage loans
(B) Commercial mortgage backed securities
(C) B-pieces from CMBS securitization transactions
(D) Bank securities

50) Commercial mortgage backed securities differ from residential mortgage backed securities in that:
(A) CMBS are created by securitizing residential mortgage loans
(B) RMBS payments are derived from the cash flows from a pool of government bonds
(C) Default risk is more significant for CMBS than for RMBS
(D) Prepayment risk is more significant for CMBS than for RMBS