

## UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION SEMESTER I SESSION 2019/2020

COURSE NAME

: REAL ESTATE FINANCE

**COURSE CODE** 

: BPE 23402/ BPE 22802

PROGRAMME CODE

: BPD

EXAMINATION DATE

: DECEMBER 2019/ JANUARY 2020

**DURATION** 

: 2 HOURS

INSTRUCTION

: ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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- Adam is considering the purchase of a piece of land in Seremban. He can buy the land today and expects the price to rise to RM15,000 at the end of 10 years. He believes that he should earn an investment yield of 12% compounded annually on his investment. The asking price for the land is RM7,000.
  - (a) Advise whether Adam should buy the land.

(5 marks)

(b) Calculate the internal rate of return (IRR) if Ahmad buy the property at RM7,000 and able to sell at RM15,000 after 10 years.

(10 marks)

(c) Determine how long will it take for the land to value at RM30,000 (assume 12% annual growth rate).

(10 marks)

- Pikri and Aisyah want to purchase a condo at the coast of Port Dickson. They will spend RM650,000 on the condo and are taking out a loan for the condo for twenty years at 7% interest. To help them make the final decision, it is important that they calculate the loan repayment for the next twenty years. They are confident to be able to pay back the loan if the repayment amount is lower than RM65,000 per year.
  - (a) Calculate the yearly repayment amount.

(5 marks)

(b) Prepare an amortization schedule.

(20 marks)

Q3 (a) A local finance company quotes a 14 percent interest rate on one-year loans. So, if you borrow RM20,000, the interest for the year will be RM2,800. Because you must repay a total of RM22,800 in one year, the finance company requires you to pay RM22,800/12, or RM1,900, per month over the next 12 months.

Calculate the effective annual rate.

(10 marks)



- (b) An ordinary annuity assumes equal payments at the end of each period over the life of the annuity. An annuity due is the same thing except the payments occur at the beginning of each period instead. Thus, a three-year annual annuity due would have periodic payment cash flows occurring at Years 0, 1, and 2, whereas a three-year annual ordinary annuity would have periodic payment cash flows occurring at year 1, 2, and 3.
  - (i) Calculate the present value of a six-year ordinary annuity contract of RM525 payments at a 9.5% annual discount rate. (10 marks)
  - (ii) Compute the present value of the same contract if it is an annuity due. (5 marks)
- Q4 (a) You are planning to save for retirement over the next 30 years. To do this, you will invest RM700 a month in a stock account and RM300 a month in a bond account. The return of the stock account is expected to be 11%, and the bond account will pay 7%. When you retire, you will combine your money into an account with a 9% return.

Calculate the amount you can withdraw each month from your account assuming a 25-year withdrawal period.

(20 marks)

(b) Suppose an investment offers to triple your money in 12 months.

Calculate the rate of return per quarter offered.

(5 marks)

**TERBUKA** 

-END OF QUESTIONS-