Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2016/2017

COURSE NAME	:	REAL ESTATE INVESTMENT AND APPRAISAL
COURSE CODE	:	BPE 34003
PROGRAMME	:	BPD
EXAMINATION DATE	:	JUNE 2017
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

TERBUKA

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 You are considering three loan proposals to finance the purchase of investment property. The purchase price is RM500,000 and the expected net operating income is RM60,000. The alternatives are:

i. Loan-to-value ratio is 90 percent, interest rate is 9 percent, and terms are 25 years, level amortising with monthly payments.
ii. Loan-to-value ratio is 80 percent, interest is 8 percent, and terms are 25 years, level amortising with monthly payments.
iii. Loan-to-value ratio is 80 percent, interest is 7.5 percent + three points, and terms are 25 years, fully amortising with monthly payments.

(a) Determine the effective interest rate for each loan, assuming the loan is outstanding for the full 25-year amortisation term.

(10 marks)

(b) Suggest the most favourable loan alternative to investor's financial position.

(15 marks)

Q2 Small City currently has one million square feet of office space, of which 900,000 square feet is occupied by 3,000 employees who are mainly involved in professional services such as finance, insurance and real estate. Small City's economy has been fairly strong in recent years, however due to current global recession, growth in employment is expected to be somewhat low over the next few years, with projection an increase of just 100 additional employees per year over the next three years. The amount of space per employee is expected to remain the same. Nevertheless, a new 50,000 square-foot office building was started before the recession and its space is expected to become available at the end of the current year (one year from now). No more space is expected to become available after that for quite some time.

(a) Calculate:

(i) Current occupancy rate for office space in Small City.

(5 marks)

(ii) The occupancy rate at the end of each year for the next there years.

(5 marks)

(iii) Amount of office space that will be absorbed each year for the next three years.

(5 marks)

(d) Evaluate the Small City's office market condition over the next there years based on the above analysis.

(10 marks)

Q3 An investor would like to purchase a new apartment property for RM2 million. However, she faces the decision of whether to use 70 percent or 80 percent financing. The 70 percent loan can be obtained at 10 percent interest for 25 years. The 80 percent loan can be obtained at 11 percent interest for 25 years.

Net Operating Income (NOI) is expected to be RM190,000 per year and increase at 3 percent annually, the same rate at which the property is expected to increase in value. The building and improvements represent 80 percent of value and will be depreciated over 27.5 years. The project is expected to be sold after 5 years. Assume a 36 percent tax bracket for all income and capital gains tax.

(a) Compute the Before Tax Internal Rate of Return (BTIRR) and After Tax Internal Rate of Return (ATIRR) for each level of financing (assume monthly mortgage amortisation).

(10 marks)

(b) Recommend financing package that offers favourable leverage.

(15 marks)

Q4 The XYZ Corporation is considering opening an office in a new market area that would allow it to increase its annual sales by RM2.5 million. Cost of goods sold is estimated to be 40 percent of sales, and corporate overhead would increase by RM300,000, not including the cost of either acquiring or leasing office space. The corporation will have to invest RM2.5 million in office furniture, office equipment, and other up-front costs associated with opening the new office before considering the costs of owning or leasing the office space.

A small office building could be purchased for sole use by the corporation at a total price of RM3.9 million, of which RM600,000 of the purchase price would represent land value, and RM3.3 million would represent building value. The cost of the building would be depreciated over 39 years. The corporation is in 30 percent tax bracket.

An investor is willing to purchase the same building and lease it to the corporation for RM450,000 per year for a term of 15 years, with the corporation paying all real estate operating expenses (absolute net lease). Real estate operating expenses are estimated to be 50 percent of the lease payments. Estimates are that the property value will increase over the 15-year lease term for a sale price of RM4.9 million at the end of 15 years. If the property is purchased, it would be financed with an interest-only mortgage for RM2,730,000 at an interest rate of 10 percent with a balloon payment due after 15 years.

(a) Calculate:

(i) The return from opening the office under the assumption that it is leased.

(5 marks)

(ii) Calculate the return from opening the office under the assumption that it is owned.

(5 marks)

(c) Suppose that five years ago the corporation had decided to own rather than lease the real estate. Assume that it is now five years later and management is considering a sale-leaseback of the property. The property can be sold today for RM4,240,000 and leased back at a rate of RM450,000 per year on a 15-year lease starting today. It was purchased five years ago from RM3.9 million. Assume that the property is worth RM5.7 million at the end of the 15-year lease.

Determine the amount that the corporation would receive from a sale-leaseback of the property.

(15 marks)

-END OF QUESTIONS-