CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE

MSCF 816: REAL ESTATE FINANCE AND INVESTMENTANALYSIS

STREAMS: MSCF **TIME: 3 HOURS**

DAY/DATE: WEDNESDAY 11/8/2021 **8.30 A.M. – 11.30 A.M.**

INSTRUCTIONS: ANSWER ALL QUESTIONS

a) A Church building with a total area of $40M^2$ is 8 years old and need to be valued for book purposes. The estimated total economic life is 80 years. It stands on an area of land measuring 2 hectares. Vacant land in the vicinity has been selling at Ksh. 1,000,000 per hectare. Current construction for similar building averages Ksh. 50,000 per M^2.

Required: Estimate the value for this building using the cost approach method (6 marks)

b) Explain some of the characteristics an investor should consider while making a decision whether to invest in real estate or to make other forms of investment (10 marks)

c) A real estate property has the following information. The property is worth sh 3,000,000 and 75% of the property is financed by a mortgage at a yearly rate of 12%. The mortgage is a constant payment mortgage with an annual payment of sh 528,068 per year. The net operating income of the property in the first year is sh 925,000. The net operating income is expected to grow at 6% for 3 years then pick a constant rate of 10% into perpetuity.

Depreciation amount is sh 25000 and it is on straight line method
The terminal value of the property is sh 4,000,000
The required rate of return is 18%
Tax rate is 30%.
Required;

i) Calculate the after tax cash flow of the property for 4 years (10 marks)

ii) Calculate the Net Present Value of the property (4 marks)

d) Describe any four challenges facing real estate industry in Kenya. (10 marks)

Question Two

a) A mortgage loan in the amount of Sh.100, 000 is made at 12 percent interest for 20 years. Payments are to be monthly in each part of this problem.

Required, the amortization schedule for the first 3 months and monthly payments to be made if:

i) The loan is fully amortizing (6 marks)

ii) It is a partially amortizing loan and a balloon payment of Sh.50, 000 is scheduled at the end of year 20. (4 marks)

iii) It is a non-amortizing or "interest only," loan. (4 marks)

b) Real estate investors and portfolio managers chose investment styles with the intent of realizing superior investment performance. Describe the following investment styles:

i). Contrarian investing strategy

ii) Market timing strategy (6 marks)

Question Three

a) You are trying to determine the value of a small retail center containing 4,500 square feet. There are three leasable spaces in the building, and at present two of the spaces are leased. You have determined the following information:

Market rent for this type of space is Sh22.50 per square foot.

The owner has Sh3,000 per year in miscellaneous income.

The vacancy rate is 5% and the collection loss rate is 1%.

Reserves for replacement is sh 5000

Operating Expenses from the reconstructed operating statement are Sh.30,500.

Determine the Net Operating Income (NOI) for the subject property. (5 marks)

b) Write short notes on:

Land zoning

Development (Real Estate Investment Trust) REIT

Taxation of income producing real estate (9 marks)

c) Lenders and investors are concerned about various risks undertaken when making loans and investments. Briefly describe any four risks affecting mortgage loans. (6 marks)

Question Four

a) Using a diagram, describe the different types of mortgage backed securities found in the secondary mortgage market (9 marks)

b) Clearly distinguish the following terms as used in real estate Finance.

i) Freehold and lease hold estate

ii). Estate in possession and estate not in possession (3 marks)

c)Libo warehouse has a projected year 1, Net Operating Income of sh 85,111 the NOI is expected to grow by 7% for the next 2 years and grow by 8.25% for the subsequent 2 years and at a constant rate of 8% afterward. Given a required rate of return of 12%.

Determine:

i. The terminal cap rate (1 mark)
ii. How much would the property sell for at the end of the 5^{th} year (3 marks)
iii. What is the property worth today (3 marks)
iv. What is the current capitalisation rate (1 mark)
