Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2019/2020

COURSE NAME	:	REAL ESTATE VALUATION
COURSE CODE	:	BPE 12303
PROGRAMME CODE	:	BPD
EXAMINATION DATE	:	DECEMBER 2019 / JANUARY 2020
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **SEVEN (7)** PAGES

Q1 Due to the complexity of the property market, it is often difficult to determine the value of property interests.

(a) Outline the key characteristics of the property market that make it necessary to employ the skills of a professional valuer.

(9 marks)

(b) Illustrate with a diagram how location and accessibility influence the property price/value.

(6 marks)

(c) Explain **FOUR (4)** internal factors that will affect real estate value.

(10 marks)

Q2 Based on cases provided, calculate the income received:

(a) Mr X owns a freehold property in Kota Damansara, Selangor. He receives an income of RM24,000 every year for 9 years from her rented property. Market rental is anticipated to increase to RM2,500 per month at the 10th year.

Calculate the market value when the required rate of return is 7% per annum.

(5 marks)

(b) Mrs A owns 2 acres freehold commercial land in Petaling Jaya. She leased the land to Mr C at RM120,000 per acre/per annum for a period of 15 years. Mr C then sub leased the land to Mr S for a period of 10 years with a rate of payment RM150,000 per acre/per annum. The rate of return for the same properties is 7% per annum and sinking fund at 3%.

Estimate the income gathered from this investment to Mrs A and Mr C.

(10 marks)

(c) A landlord needs RM250,000 to refurbish a condominium in five years' time. He will save money from rental income (paid monthly in arrears) each year and has found a safe investment paying a nominal rate of 3% per annum.

Calculate the monthly amount he should invest.

(5 marks)

(d) You borrow RM120,000 to buy a house on a mortgage. The nominal annual interest rate on the mortgage is 10% and the mortgage has a term of 25 years.

Calculate the monthly repayment.

(5 marks)

Q3 Your client is interested in purchasing, as an investment, the following retail unit currently occupied by an independent retailer. This prime property, bearing address no. 2, Jalan Universiti 2 (currently tenanted to ZZ Accessory) comprises:

Ground Floor: width 10m, depth 20m; Corner lot; WC in the rear right hand corner of the shop of 1m width and 2m depth. The current rent payable was agreed 3 years ago at RM45,000 p.a. on full rental insurance (FRI) terms with 5 year upward only rent reviews.

The subject property (SP) is shown in location map is attached as **Figure Q3**:

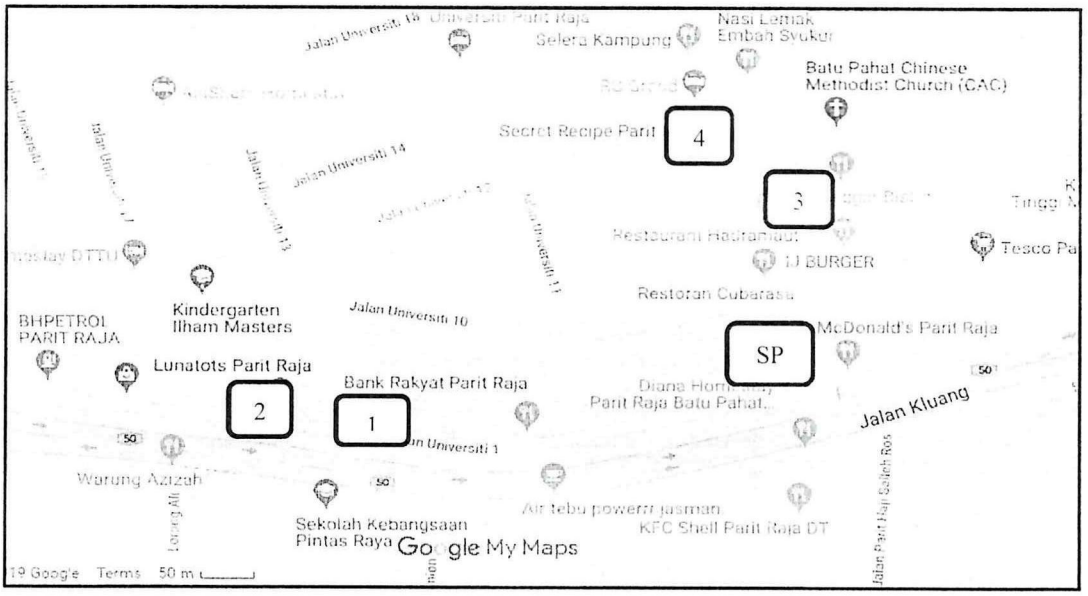

Figure Q3: Location map of Bandar Universiti

You are aware of the following market evidences (numbered and marks in location plan in Figure Q3):

1. **110 Jalan Universiti 1 (Bank Rakyat)**: prime; GF 10m wide and 20m deep; recently let at RM60,000 p.a. on a modern FRI lease; recently sold for RM682,000.

2. **140 Jalan Universiti 1 Lunatots Sdn Bhd),** peripheral prime; GF, 10m wide and 20m deep; recently let at RM35,000 p.a. on a modern FRI lease; recently sold for RM582,000.

3. **10 Jalan Universiti 4 (Restaurant Hadramaut)**: secondary; GF, 10m wide and 20m deep; recently rental reviewed at RM40,000 on FRI terms. The property was bought 5 years ago at RM450,000.

4. **30 Jalan Universiti 2 (Secret Recipe)**: secondary prime; GF 10m wide and 20m deep; let January 2018 at RM50,000 p.a. on a modern FRI lease; sold for RM598,000 9 months ago.

(a) Your client does not fully understand the concept of "zoning" retail units as per the RICS requirement.

Explain why 'zoning' is relevant to the retailing sector.

(5 marks)

(b) You are required to advise your client on the market rent and yield of these premises.

Prepare a fully annotated analysis of the comparable evidence and valuation of the subject property, clearly stating any assumptions you make.

(15 marks)

(c) Advise your client on the market value of the property, clearly stating any assumptions you make based on findings in **Q3(b)**.

(5 marks)

Q4 You are part of the analysis team of an investment fund that can finance two different double storey shop office located in Jalan Telawi 2, Bangsar, Kuala Lumpur.

The tenancy agreement is based on 2 + 2 basis. Both properties can be bought today (Year 0) at the stated price. The investment is expected to produce a cashflows from Year 1 to Year 3. At the end of Year 3, both properties are estimated to have a re-sale value stated in Year 3.

The estimated cash flows of the two properties are shown in the **Table Q4** below:

Table Q4: Estimated cash flows

Year	Shop house 1	Shop house 2
0	-RM600,000	-RM850,000
1	RM150,000	RM180,000
2	RM150,000	RM200,000
3	RM800,000	RM900,000

(a) Calculate the Net Present Values (NPV) of the 2 projects using discount rates of 7% and 9%.

(15 marks)

(b) Estimate the Internal Rates of Return (IRR) of the two investments to the nearest 0.5%.

(5 marks)

(c) Justify which investment your company should invest on based on your findings in **Q4(a)** and **Q4(b).**

(5 marks)

-END OF QUESTIONS-

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VALUATION MATHEMATIC FORMULA SHEET

Present Value of £1 p.a. in Perpetuity (Years' Purchase in Perpetuity)

$$\frac{1}{i}$$

Present Value of £1 p.a. in Perpetuity (in advance)

$$\frac{1}{i} \bullet (1+i)$$

Years Purchase (YP) of £1 p.a. in Perpetuity (in advance)

$$\frac{1-(1+i)^{-n}}{i}$$

Annual Sinking Fund (ASF)

$$\frac{i}{(1+i)^{n}-1}$$

i = accumulation rate, SF

YP Dual Rate (tax (t) adjusted)

$$\frac{1}{i+\left[ASF \bullet \left(\frac{1}{1-t}\right)\right]}$$

Notation for above Formulae

i = remuneration rate
t = tax rate

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Internal Rate of Return (approximation)

$$IRR = r_L + \left[(r_H - r_L) \times \left(\frac{NPV_L}{NPV_L - NPV_H} \right) \right]$$

IRR = internal rate of return
r_l = lower trial rate
r_h = higher trial rate
NPV_l = net present value at the lower trial rate
NPV_h = net present value at the higher trial rate

Implied Annual Growth Rate (IAGR) Formula

$$(1+g)^m = \frac{\left(1/k\right) - \left[\frac{1-(1+e)^{-m}}{e}\right]}{\left(1/k\right) \times (1+e)^{-m}}$$

k = all-risks yield
e = equated yield
m = number of periods between each rent review
g = implied annual growth rate (IAGR)