Universiti Tun Hussein Onn Malaysia

# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION
## SEMESTER II
## SESSION 2018/2019

| | | |
|---|---|---|
| COURSE NAME | : | SPECIAL PROPERTY VALUATION |
| COURSE CODE | : | BPE 23803 |
| PROGRAMME CODE | : | BPD |
| EXAMINATION DATE | : | JUNE / JULY 2019 |
| DURATION | : | 3 HOURS |
| INSTRUCTION | : | ANSWER **ALL** QUESTIONS |

THIS QUESTION PAPER CONSISTS OF **FIVE (5)** PAGES

**Q1** Valuation is required for the air rights over the GW Bridge Express Way. The proposed development is a subsidized housing project, comprising 4 blocks of 32-storey apartments with 960 units and 5,040 rooms with 204 parking spaces. Details and procedures on the proposed development are as in **Table Q1** below:

**Table Q1: Details and procedures of the proposed development**

| No. | Descriptions | Estimations |
|---|---|---|
| 1 | Revenue from 5,040 rooms | RM348 per room/annum |
| 2 | Revenue from parking space | RM360 per space/annum |
| 3 | Allowance for vacancies and collections loss; say | 3% |
| 4 | Estimated expenses from Tax of RM8,000,000; say | 4.25% |
| 5 | Estimated expenses from operation; say | RM412,000 |
| 6 | Estimated expenses from replacements; say | RM35,000 |
| 7 | Building cost (without abnormal cost); say | RM17,825,000 |
| 8 | Abnormal costs; say | RM1,500,000 |
| 9 | Savings; say | RM750,000 |
| 10 | Interest and Carrying | RM175,000 |
| 11 | Overall rate of return, estimation; say | 5% |

Relevant assumptions may be made to support your valuation and all calculations must be explicitly shown.

(a) Calculate the estimation of Air Rights Value for the proposed development.

(15 marks)

(b) Explain **FIVE (5)** factors affecting the Value of Air Rights.

(10 marks)

**Q2** Valuation is required for the amount of payment to be made to the owner of 2 hectares of land, which has planning permission for the erection of 40 detached houses. A sewer, length 300 metres, runs along the edge of the plot and a 10 m wide easement is sought by the local authority. It is possible to build all 40 houses on the site, but 5 plots will be adversely affected, their value being diminished by 10%.

A comparable similar type of residential building land per hectare within the surrounding area is ranging from RM4.5 mil per ha in prime area to RM400,000 per ha in the rural area. It is also notable that a typical value for the urban area not far from the subject property of RM800,000 per ha or RM40,000 per plot.

Based on the available data provided, you are required to:

(a) Calculate the "Diminution of Value" of the subject property where a sewer pipe installation is laid under subject land, using "Before and After" valuation

approach. Suitable assumption may be made in the absence of relevant information and you are required to state all assumptions clearly in the footnotes.

(10 marks)

(b) Calculate the amount of payment to be made to the owner of the subject land based on 50% is allowed for capital value of the "easement area" of the subject land. Suitable assumption may be made in the absence of relevant information and you are required to state all assumptions clearly in the footnotes.

(10 marks)

(c) List **FIVE (5)** sectors that require easements or wayleaves.

(5 marks)

**Q3** You have been requested by ABC Bank to value the factories buildings for financing purposes. Your investigation reveals the following:

The subject property is currently used as a light engineering works and contains the following accommodation buildings and each of the construction buildings' costs, site works, plant and machinery, and the site area are as listed in **Table Q3** below.

**Table Q3: Detail components of the subject property**

| Ref | Description | Area sq.m | Cost (RM/sq.m) | Allowance |
|---|---|---|---|---|
| Buildings: | | | | |
| 1 | Office block | 650 | 750 | 10% |
| 2 | Factory | 5,000 | 325 | 5% |
| 3 | Sub-station | 15 | 1,250 | 12.5% |
| 4 | Workshop | 500 | 500 | 0% |
| 5 | Boiler House | 1,500 | 1,750 | 0% |
| Site works: | | | | |
| 1 | Roads | 50,000 | 50 | 5% |
| 2 | Fencing | 2,500 | 65 | 0% |
| 3 | Yard | 1,700 | 45 | 0% |
| Plant and machinery: | | | | |
| 1 | Generators X2 3000 KVA | - | 50 | 75% |
| 2 | Steelworks 25 tons | - | 1,500 | 0% |
| Land /Site: | | | | |
| 1 | Developed land | 15 | 500,000 | 5% |
| 2 | Undeveloped land | 2.5 | 250,000 | 0% |

Based on the available data provided, you are required to:

(a) Calculate the market value of the subject property for financing purpose. Suitable assumption may be made in the absence of relevant information and you are required to state all assumptions clearly in the footnotes

(19 marks)

(b) Outline any **THREE (3)** factors affecting valuation for factories, workshops and warehouse properties

(6 marks)

**Q4** Lot No 567 Mukim of Ampang, District of Hulu Langat, State of Selangor is located within the Perang Forest Reserve. It is an on-going quarry and is located fronting Jalan Kuari and is about 25 kilometers from the City of Kuala Lumpur.

Particulars of the subject property are as follows:

| | |
|---|---|
| Land area | : 100 acres |
| Tenure | : Leasehold for 30 years expiring on 31/12/2040 |
| Market Value of plant and machinery | : RM12,000,000 |
| Granite reserve | : 188,000,000 tonnes as at December 2018 |

Production of aggregates in tonnes for the past five years is as in **Table Q4(a)**.

**Table Q4(a): Production of aggregates in tonnes**

| Types | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Aggregate 3/8" | 28,000 | 44,000 | 50,000 | 56,000 | 29,000 |
| Aggregate ¾" | 630,000 | 657,000 | 372,000 | 468,000 | 660,000 |
| Aggregate 1" | 23,000 | 33,000 | 43,000 | 50,000 | 23,000 |
| Aggregate 2" | 67,000 | 68,000 | 30,000 | 58,000 | 67,000 |
| Aggregate 6" x 9" | 45,000 | 47,000 | 39,000 | 46,000 | 45,000 |
| Crusher run | 199,000 | 238,000 | 156,000 | 226,000 | 199,000 |
| Quarry dust | 213,000 | 252,000 | 149,000 | 222,000 | 213,000 |

The average prices of crushed stones over the last five years are as in **Table Q4(b)**.

**Table Q4(b): The average prices of crushed stones**

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Average price (RM/tonne) | 15.04 | 13.56 | 14.52 | 12.38 | 13.80 |

The average production costs per tonne is as in **Table Q4(c)**.

**Table Q4(c): The average production costs**

| Types | RM/tonne |
|---|---|
| Blasting | 0.82 |
| Transportation | 1.30 |
| Royalty | 1.15 |
| Crushing | 3.40 |
| Administration | 0.45 |

Components of the buildings on site are as in **Table Q4(d)**.

**Table Q4(d): Components of the buildings on site**

| Buildings | Construction | Floor area (sf) |
|---|---|---|
| Office | 2-storey of permanent construction of fair condition | 8,200 |
| Workshop | Open sided of steel portal frame of fair condition | 12,000 |
| Explosive store | 1-storey of permanent construction of fair condition | 560 |
| Canteen | 1-storey of permanent construction of fair condition | 1,200 |
| Guardhouse | 1-storey of semi-permanent construction of fair condition | 600 |

Comparable vacant land for alternative use in the area is RM60,000 per hectare. It is assumed that the operating permit is renewable until the rock deposits are exhausted.

Calculate the market value of the subject property for loan security purpose by using an appropriate method of valuation.

(25 marks)

**- END OF QUESTIONS -**