



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2012/2013**

COURSE NAME : SPECIAL REAL ESTATE
VALUATION

COURSE CODE : BPE 33503

PROGRAMME : 3 BPD

EXAMINATION DATE : DECEMBER 2012/JANUARY 2013

DURATION : 3 HOURS

INSTRUCTION : ANSWER **FOUR** ONLY FROM SIX
QUESTIONS.

THIS QUESTION PAPER CONSISTS OF ELEVEN (11) PAGES

Q1 Rocky One Bhd has a 7-hectares granite outcrop in the Klang Valley having another 60 years unexpired lease. The company has started quarrying operations 4 years ago with a 7-year permit. Among other things, it has invested in constructing a kilometer road access and:

- Constructed a factory building at a cost of RM150,000
- Bought a new rock processing plant at RM1,700,000
- Bought 2 units new bulldozers at RM200,000 each
- 2 units new 8 tonne lorries at RM180,000 each
- New weigh bridge at RM60,000
- 2 units new air compressor at RM1,000 each

The quarry obtained water and electricity supply from the public utilities. A geological report revealed that there is 5,000,000 tons of rock deposit. The maximum production capacity is 40,000 tons per month.

An analysis of the last three years trading accounts revealed the following information:

Production

Particulars/Years	2009	2010	2011
<u>Type of product:</u>			
Aggregate ¾"	50%	50%	50%
Aggregate 3/8"	10%	10%	10%
1" gravel	10%	10%	10%
Crusher run	20%	20%	20%
Sand and Dust	10%	10%	10%
Total Production	350,000 tons	390,000 tons	415,000 tons

The average market price for the products are as follows:

Stone Gravel:

1. ¾" @ RM14.00 per tonne
2. 3/8" @ RM13.50 per tonne
3. 1" @ RM15.00 per tonne

Crasher run @ RM20.00 per tonne

Sand and dust at RM 12.00 per tonne

The operating Expenditure are as follows:

Particulars/Years	2009	2010	2011
1. Wages, overtime, EPF, Socso	160 500	180 000	194 000
2. Bore and explosive	95 200	105 000	109 500
3. Repairs to building, plant & machinery implements	88 500	102 000	90 000
4. Fuel & oil	45 500	46 700	48 500
5. Machinery spare parts	79 000	102 000	100 000
6. Operating insurance	30 000	32 000	35 000
7. Royalty	700 000	780 000	830 000
8. Operating licence	3 000	3 000	3 000
9. Administration & marketing	210 000	220 000	230 000
10. Interest on working capital	65 000	75 000	75 000

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.

By using an appropriate method of method, you are required to:

- (a) Value the subject property for balance sheet purpose. Suitable assumption may be made in the absence of relevant information and you are required to state all assumptions clearly in the footnotes. (20 marks)
- (b) State reason (s) of the chosen valuation method in Q1(a) over other methods of valuation. (5 marks)

Q2 You have been requested by your client to determine the Annual Value of the following property for rating purpose. The subject property is a 30 year State Lease owned by the SHAB Motors Limited of which 6 years has expired. The station has been in operation for 5 years. The site measures 51 meters wide and 46.71 meters deep. The station is located along one of the busy streets of a big town.

The station comprises a single storey building with a car service annexe. The building has spandex steel roof, brick walls and concrete floor finished with a ceramics and mosaic tiles. The building accommodation has 25 sq. m. office, 38 sq.m, sales area and 10 sq. m. toilet area. The service area is 185.8 sq.m.

The forecourt and its canopy with an area of 185.8 sq. m., houses two(2) pump islands which consist of seven (7) unleaded pumps and one (1) leaded pump. Other facilities include one (1) open air diesel pump, one (1) air pumps, two (2) logo signs and four (4) underground tanks each with a capacity of 15,000 litres.

The construction cost of this type of station is as follows:

	RM
Office space	968 psm
Sales area	753 psm
Service area	538 psm
Toilet area	753 psm
Underground tanks	5,000 each
Two logo signs and air pump	30,000
Forecourt, underground pit, cables piping and tarmac	150,000
Petrol pumps	10,000

An analysis of the last 3 years trading accounts revealed the following:

Petrol sales

- Unleaded grade was sold at an average of 3,700,000 litres per annum
- Leaded grade was sold at an average of 800,000 litres per annum
- Diesel grade was sold at an average of 800,000 litres per annum

The wholesale purchase price from the dealer and the retail price charged to customer average as follows:

Petrol grade	Wholesale sale price (RM/ litre)	Retail price (RM/ litre)
Unleaded	1.20	1.30
Leaded	1.10	1.20
Diesel	0.70	0.80

Sales of Goods

Average gross sales profit of RM 50,000 per annum

Car Service

Average service of 10 cars per day @ RM80 per car

Car wash

An average of 15 cars per day @ RM10 per car

Operating Expenditure

The average operating expenditure is as follows:

	RM/annum
1) Business Operating Expenditure	
• Salary, Bonus EEPF, Socso	150,000
• Business insurance premium p.a	1,250
• Water p.a	1,500
• Electricity p.a	3,000
• Business license p.a	1,500
• Audit and Secretarial fee p.a	5,000
• Interest on Stock RM 100,000	10%
Cash RM 30,000	12,000
• Administration expenses	
2) Operating Outgoings	
• Repairs (External & Internal) p.a	6,000
• Fire insurance premium p.a	1,000
• Assessment rates @ 8% on A.V	80,000
• Quit Rent p.a	4,000
• Management p.a	6,000

An analysis of the market revealed that commercial sites were transacted in the region of RM 646 – RM 861 psm.

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

- (a) Value the subject property by using the income/profit method of valuation
(14 marks)
- (b) Value the subject property by using the cost/contractor method of valuation
(8 marks)
- (c) Propose your own opinion of value derivation based on both selected methods of valuation in Q(a) and Q(b) above.
(3 marks)

- Q3** SHAB Plantation Berhad owns a timber concession in the east coast peninsular forest area. The company has requested you to value part of the concession for financing purposes. The concession is divided into two blocks, A and B and the harvesting plan is on a rotation silviculture principle.

From a survey report done by a timber consultation it is found that the volume of loggable timber taking a 45 cm dbh are as follows:

Block	Loffing period per cycle	Land area	Estimated volume (M3)
A	1 year	130 ha	10 400
B	1 year	138 ha	11 316

The composition of timber species found in the concession are as follows:

Timber species	Block A	Block B
Merbau	32%	30%
Keruing	38%	37%
Kempas	13%	18%
Mengkulang	10%	8%
Other medium hardwoods	7%	7%

It is estimated that the cost of extracting the timber in relation to the gross revenue will be as follows:

Pre-felling operating costs	7.2%
Log handling costs (felling, bucking, skidding, yarding, loading, Scaling, road maintenance, log-yard, delivery)	25.4%
Administrative overheads	4.4%
Interest on working capital and equipment	10%

Royalty payable at an average of RM1.50 per cubic metre.

The existing market price of timber is as below.

	<u>FEBRUARY</u>	<u>APRIL</u>	<u>JUNE</u>	<u>AUGUST</u>	<u>OCTOBER</u>	<u>DECEMBER</u>
<u>HEAVY HARDWOODS</u>						
CHENGAL	208	202	247	235	237	222
BALAU	158	148	148	159	151	154
RED BALAU	144	146	145	145	151	147
MERBAU	218	215	210	205	211	202
OTHER HEAVY HARDWOODS	88	88	84	98	92	94
<u>MEDIUM HARDWOODS</u>						
KERUING	135	130	129	123	124	126
KEMPAS	105	103	102	101	100	110
KAPUR	156	155	149	148	144	153
HENGGULANG	139	140	136	145	131	128
OTHER MEDIUM HARDWOODS	86	86	85	81	81	81
<u>LIGHT HARDWOODS</u>						
DARK RED MERANTI	171	170	166	168	161	157
LIGHT RED MERANTI	150	143	143	149	142	140
YELLOW MERANTI	97	97	96	93	92	94
WHITE MERANTI	120	120	119	119	120	123
RED MERANTI	129	134	132	131	132	135
MERSAWA	140	138	134	125	125	122
NYATOH	102	118	115	112	111	115
SEPETIR	90	93	91	91	94	94
JELUTONG	144	146	135	135	132	130
OTHER LIGHT HARDWOODS	82	82	83	72	72	78

By using an appropriate method of method, you are required to:

- (a) Value the timber concession 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. (20 marks)
- (b) State reason (s) of the chosen valuation method in Q3(a) over other methods of valuation. (5 marks)

- Q4** You have been requested by your client who is a Housing Developer to determine the market value of an on going housing scheme in your area, which he plans to buy over. The property is a freehold residential housing scheme with a gross land area of 22 acres and formerly identified as Lot 111, Section U10, city of Shah Alam, state of Selangor. The land was approved for a mixed housing development and construction has started six months ago. Further details regarding the property are as follows:

The approved development comprises the following:

Housing Type	No of units approved
• Double storey terraced houses (20 x 70)	176
• Double storey terraced houses (22 x 80)	44
• Four storey shophouses (20 x 80)	22
• 10-storey low-cost apartments (620 sq. ft)	180

Based on your inspection and data collection, you have gathered the following data from the prospective vendor:

Sales data on selling process and number of units sold are as follows:

Housing Type	Selling price (RM/unit)	No of unit sold	Money collected (RM)
• Double storey terraced houses (20 x 70)	250,000	77	3,850,000
• Double storey terraced houses (22 x 80)	320,000	18	563,200
• Four storey shophouses (20 x 80)	560,000	0	0
• 10-storey low-cost apartments (620 sq. ft)	42,000	0	0

Construction cost and payment made to contractors for work done are as follows:

Housing Type	Construction cost (RM/unit)	Total Construction cost (RM)	Money collected (RM)
• Double storey terraced houses (20 x 70)	70,000	12,320,000	1,848,000
• Double storey terraced houses (22 x 80)	90,000	3,960,000	1,100,000
• Four storey shophouses (20 x 80)	288,000	6,336,000	0
• 10-storey low-cost apartments (620 sq. ft)	22,500	3,960,000	0

Additional information given to you are as follows:

- The project will take another 2.5 years to complete
- Survey and subdivided cost is RM350.00 perunit
- Cost of infrastructure including contribution to relevant authorities is RM7,000 per unit.
- 20% of the total infrastructure cost has been paid to relevant parties
- Bridging finance is available at BLR + 3% per annum

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

- (a) Value the above development property using the appropriate method of valuation. Suitable assumption may be made in the absence of relevant information and you are required to state all assumptions clearly in the footnotes. (22 marks)
- (b) State reason (s) of the chosen valuation method in Q4(a) over other methods of valuation. (3 marks)

Q5 You have been requested by the BMS Sdn Bhd to value a modern purpose-built 4 star provincial hotel for insurance purpose. The hotel which is wholly owned by the SHA Bhd, is having 150 letting bedrooms with well planned, flexible accommodation including restaurant, bar, conference rooms and leisure club with 300 members. Easily accessible just off a motorway junction and with good car parking facilities. Reliant on corporate business and conference trade during the week with some leisure based trade at weekends.

Advertised tariff :	Double	RM120.00 per night incl. VAT
	Single	RM95.00 per night incl. VAT

Other relevant data to the subject property are assumed as follows:

- Room occupancy 85%
- Double occupancy 45%
- Single occupancy 75%
- Average achieved room rate at 75% of a advertised tariff
- Room revenue at 45% of total revenue
- Comparable equated yield of the Hotel is at 10%.
- Equated yield of the Hotel is at 15%.
- Renewal fund for the replacement of fixtures, fittings and furnishings necessary to maintain the adopted level of trade is at 10% from total room revenue.
- Rateable value of the Uniform Business rates is assumed at RM120,000
- Income and expenditure will increase by 5% per annum
- The residual value in a DCF may account for up to 25% of total value of the 10th year.

In deriving to the market value, the trading projections and actual accounts should be ideally prepared in accordance with the current version of the Uniform System of Accounts. This categorises accounts into:

- 1) Revenue
- 2) Departmental Costs and Expenses
- 3) Total Operated Department Income
- 4) Undistributed Operating Expenses
- 5) Income Before Fixed Charges (IBFC)

- (a) By applying the Earning Multiplier Approach, determine the market value of the hotel for Insurance Purpose.

(10 marks)

- (b) By applying the DCF approach, determine the market value of the hotel for Insurance Purpose.

(15 marks)

Q6 BMS Plantation Berhad owns a freehold estate land. The land area is 1,000 acres and the topography of the land is undulating in nature. About 20 acres of the land is reserved for internal service road. The estate can be accessible via secondary road and is located about 20 kilometers from the nearest town. The estate is in good maintenance and management.

Detail of the estate's plantations and productions are as follows:

Block	Acreage (Acre)	Crops	Year planted
A	250	Rubber	1987
B	230	Rubber	1992
C	250	Palm Oil	1995
D	250	Palm Oil	2004

Block	Production		
	2010	2009	2008
A	200,000 kg	210,000 kg	210,000 kg
B	230,000 kg	230,000 kg	235,000 kg
C	23,750 tonne	3,750 tonne	3,700 tonne
D	2,000 tonne	1,990 tonne	1,870 tonne

Market price of Rubber is RM3.20 per kilogram and its Production Cost is 40% from the market price. Market price of Palm Oil is RM300 per tonne and its Production Cost is RM75.00 per tonne.

Comparable sale evidences of the similar vacant land for rubber and palm oil are RM5,000 per acre and RM7,000 per acre respectively.

Economic life for rubber tree is 30 years and Palm Oil tree is 25 years.

BMS Plantation Berhad has requested you to value the subject property for financing Purpose.

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

- (a) Value the subject property by using the comparable method of valuation.
(10 marks)
- (b) Value the subject property by using the income method of valuation.
(15 marks)
- (c) Propose your own opinion of value derivation based on both methods of valuation in Q6(a) and Q6(b).
(3 marks)

-END OF QUESTION-