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UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2016/2017

TERBUKA

COURSE NAME	:	VALUATION FOR SPECIALISED PROPERTIES
COURSE CODE	:	BPE 33503
PROGRAMME	:	BPD
EXAMINATION DATE	:	DECEMBER 2016 / JANUARY 2017
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **EIGHT (8)** PAGES

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Q1 Rocky One Bhd has a 7-hectares granite outcrop in the Klang Valley and 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 one kilometre access road and the followings:

(i) Constructed a factory building at a cost of RM150,000
(ii) Bought a new rock processing plant at RM1,700,000
(iii) Bought 2 units new bulldozers at RM200,000 each
(iv) 2 units new 8 tonne lorries at RM180,000 each
(v) New weigh bridge at RM60,000
(vi) 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 are 5,000,000 tonnes of rock deposits. The maximum production capacity is 40,000 tonnes per month.

The compositions of rock aggregates (output) in tonnes and the average market prices per tonne are as shown in **Table Q1(a)** below.

Table Q1(a): Compositions of rock aggregate (production) and average market price

Particulars/Years	**2009**	**2010**	**2011**	**Market Price (RM/tonne)**
<u>Type of product:</u>				
Stone gravel Aggregate ¾"	50%	50%	50%	14.00
Stone gravel Aggregate 3/8"	10%	10%	10%	13.50
Stone gravel 1" gravel	10%	10%	10%	15.00
Crusher runs	20%	20%	20%	20.00
Sand and Dust	10%	10%	10%	12.00
Total Production (Tonnes)	**350,000**	**390,000**	**415,000**	

The average estimation of the expenditure are shown in **Table Q1(b)**:

Table Q1(b): The average estimation of the expenditure

Particulars/Years	2013	2014	2015
1. Wages, over time, 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 license	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 valuation, you are required to:

(a) Value the subject property for balance sheet purposes. 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 purposes. The subject property is a 30-year State Lease petrol station owned by 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 of a single storey building with a car service annexe. The building has spandex steel roof, brick walls and concrete floor finished with 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 petrol station is shown in **Table Q2(a)**:

Table Q2(a): Detail of construction costs

Descriptions	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 petrol sales is shown in **Table Q2(b)**:

Table Q2(b): Total sales of petrol

Petrol grade	Average Total sales
Unleaded	3,700,000 litres per annum
Leaded	800,000 litres per annum
Diesel	800,000 litres per annum

The wholesale purchase price from the dealer and the retail price charged to customer is shown in **Table Q2(c)**:

Table Q2(c): Wholesale price and retail price

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 from other goods and services are shown in **Table Q2(d)**:

Table Q2(d): Sales from other goods and services

Descriptions	Average Total sales
Profit from sales of goods	RM 50 000 per annum
Average service of 10 cars per day	RM 80 per car
Average car wash of 15 cars per day	RM 10 per car

The average operating expenditure is as shown in **Table Q2(e)** below:

Table Q2(e): The average operating expenditure

Descriptions	**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 Cash RM 30,000	10%
• Administration expenses	12,000
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 RM646 – RM861 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's method of valuation.

(8 marks)

(b) Propose your own opinion of value derivation based on both selected methods of valuation in **Q2(a)** and **Q2(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 shown in **Table Q3(a)**:

Table 3Q(a): Estimated volume of loggable timber

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 shown in **Table Q3(b)**:

Table Q3(b): The composition of timber species

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 shown in **Table Q3(c)**:

Table Q3(c): Estimated costs of extracting the timber

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

The existing market price of timber is as shown in **Table Q3(d)**:

Table Q3(d): Market price of timber

	FEBRUARY	APRIL	JUNE	AUGUST	OCTOBER	DECEMBER
HEAVY HARDWOODS						
CHENGAL	288	282	267	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
MEDIUM HARDWOODS						
KERUING	135	130	129	123	128	126
KEMPAS	105	103	102	101	100	110
KAPUR	156	155	149	148	144	153
MENGKULANG	139	140	136	145	131	128
OTHER MEDIUM HARDWOODS	86	86	85	81	81	81
LIGHT HARDWOODS						
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	125
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 valuation, 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 the BMS Sdn Bhd to value a modern purpose-built 4 star provincial hotel for insurance purposes. The hotel which is wholly owned by SHA Bhd., having 150 letting bedrooms with well planned, flexible accommodation including restaurant, bar, conference rooms and leisure club with 300 members. The hotel is also easily accessible, just off a main road and with good car parking facilities. Reliant on corporate business and conference trade during the week with some leisure based trade at the weekends.

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

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

1) Room occupancy 85%
2) Double occupancy 45%
3) Single occupancy 75%
4) Average achieved room rate at 75% of an advertised tariff
5) Room revenue at 45% of total revenue
6) The comparable equated yield of the Hotel is at 10%.
7) Equated yield of the Hotel is at 15%.
8) A renewal fund for the replacement of fixtures, fittings and furnishings necessary to maintain the adopted level of trade is at 10% of total room revenue.
9) The Rateable value of the Uniform Business rates is assumed at RM120, 000
10) Income and expenditure will increase by 5% per annum
11) The residual value in a DCF may account for up to 25% of the total value of the 10^{th} 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)

Based on the given information,

(a) Value the subject property for Insurance Purposes, by applying the Earning Multiplier Approach.

(10 marks)

(b) Value the subject property for Insurance Purposes, by applying the DCF approach.

(15 marks)

- END OF QUESTIONS -