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# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION SEMESTER I SESSION 2011/2012

COURSE NAME

SPECIAL REAL ESTATE

VALUATION

: JANUARY 2011

: 3 HOURS

COURSE CODE : BPE 3353 / BPE 33503

:

PROGRAMME : 3 BPD

DATE

DURATION

INSTRUCTION

## : ANSWER FOUR (4) QUESTIONS ONLY FROM SIX (6) QUESTIONS.

THIS QUESTION PAPER CONTAINS NINE (9) PAGES

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Q1 SHAB Sdn Bhd owns a timber concession in the Trengganu Tengah forest area. The concession is divided into four blocks, A, B, C, and D and the harvesting plan are on a rotation silviculture principle.

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

| Block | Lofting period per cycle | Land area (ha) | Estimated<br>volume (M3) |
|-------|--------------------------|----------------|--------------------------|
| A     | 1 year                   | 120            | 4,960                    |
| В     | 1 year                   | 136            | 5,710                    |
| С     | 1 year                   | 140            | 6,020                    |
| D     | 1 year                   | 145            | 5,870                    |
| Total | <del>-</del>             | 541            |                          |

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

| Timber species         | Block A | Block B | Block C | Block D |
|------------------------|---------|---------|---------|---------|
| Merbau                 | 32%     | 30%     | 30%     | 35%     |
| Keruing                | 38%     | 37%     | 35%     | 30%     |
| Kempas                 | 13%     | 18%     | 19%     | 15%     |
| Mengkulang             | 10%     | 8%      | 11%     | 10%     |
| Other medium hardwoods | 7%      | 7%      | 5%      | 10%     |

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

| Concession premium                                       | : 541 ha @ RM500 per ha                    |
|--|--|
| Deposit  | : RM20,000 per block                       |
| Pre-felling operating costs (surveys and road            | : 7.2%                                     |
| construction)  |  |
| Log handling costs (felling, bucking, skidding, yarding, | : 30%                                      |
| loading. Scaling, road maintenance, log-yard, delivery)  |  |
| Administrative overheads                                 | : 5%                                       |
| Interest on working capital and equipment                | : RM750,000 @10%                           |
| Royalty payable at an average of                         | : RM10 per cubic metre of extracted timber |
| Cess tax   | : RM10 per cubic metre of                  |
|  | extracted                                  |

The existing market price of timber is as follows:

| Timber species         | Price (RM/m3) |
|------------------------|---------------|
| Merbau                 | 794           |
| Keruing                | 587           |
| Kempas                 | 491           |
| Mengkulang             | 528           |
| Other medium hardwoods | 412           |

Based on the available data above, SHAB has requested you to: **Value** the timber concession for financing purpose.

(25 marks)

Q2 Rex theatre is the owner of 4 cineplexes located on the second floor of a shopping complex in Batu Pahat Town. It occupies a total floor area of 815 sq. metres. Each Cineplex has 150 seats built with acoustic and sensurround system, well carpeted and air-conditioned. The cinema complex is equipped with four projectors and projection screens, an office and ticket counter and a snack kiosk. The cinema has been in operation for 7 years and the property is freehold. The operator has sublet the snack kiosk at RM700 per month. Commercial floor space at this level and locality were sold in the region of between RM2, 500 and RM3, 500 per sq. m.

| Show time         | Seating Capacity Cineplex |     |     |     | Ticket<br>Price | Average Occupancy<br>Rate (%) Cineplex |    |    | e <b>y</b> |
|-------------------|---------------------------|-----|-----|-----|-----------------|--|----|----|------------|
|                   | 1                         | 2   | 3   | 4   | (RM)            | 1                                      | 2  | 3  | 4          |
| 12.00 p.m         | 150                       | 150 | 150 | 150 | 8.00            | 43                                     | 45 | 47 | 44         |
| 3.00 p.m          | 150                       | 150 | 150 | 150 | 8.00            | 50                                     | 48 | 46 | 50         |
| 6.00 p.m          | 150                       | 150 | 150 | 150 | 8.00            | 66                                     | 65 | 63 | 65         |
| 9.00 p.m          | 150                       | 150 | 150 | 150 | 8.00            | 74                                     | 75 | 76 | 77         |
| Saturday midnight | 150                       | 150 | 150 | 150 | 8.00            | 60                                     | 75 | 70 | 72         |
| Sunday matinee    | 150                       | 150 | 150 | 150 | 8.00            | 78                                     | 80 | 80 | 80         |

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

A 20% entertainment tax is levied on the ticket sales. Revenue from advertisement trailer is RM200 for every show.

The operating expenditure and the outgoings are as follows:

| Nos | Items                              | <b>Operating Expenses (RM)</b> |
|-----|------------------------------------|--------------------------------|
| 1   | Salary, wages, bonuses, EPF, Socso | 182,000 p.a                    |
| 2   | Electricity                        | 2,100 per month                |
| 3   | Water                              | 400 per month                  |
| 4   | Local films rental                 | 62,000 per month               |
| 5   | Foreign films rental               | 85,000 per month               |
| 6   | Operation license                  | 4,000 p.a                      |
| 7   | Advertisement                      | 4,000 per month                |
| 8   | Business insurance                 | 8,000 per month                |
| 9   | Projectors maintenance             | 1,500 per month                |
| 10  | Audit and secretarial fee          | 12,000 p.a                     |
| 11  | Management                         | 36,000 p.a                     |
| 12  | Interest on working capital        | 420,000 @ 10% p.a              |

Outgoings per annum are as follows:

| Nos | Items                         | Outgoings (RM) p.a |
|-----|-------------------------------|--------------------|
| 1   | Repairs (Internal & External) | 60,000             |
| 2   | Fire insurance                | 10,000             |
| 3   | Assessment rates              | 15,000             |
| 4   | Quit rent                     | 5,000              |
| 5   | Management                    | 6,000              |
| 6   | Service charge                | 104,000            |

The owner has requested you to value the cinema property for corporate purposes.

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

(a) **Value** the subject property by using the income/profit method of valuation

(15 marks)

(b) **Value** the subject property by using the comparative method of valuation

(7 marks)

(c) **Propose** your own opinion of value derivation based on both methods above.

(3 marks)

Q3 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 property are as follows:

| Land area                           | : 100 acres                                     |
|-------------------------------------|---|
| Tenure                              | : Leasehold for 30 years expiring on 31/12/2032 |
| Market Value of plant and machinery | : RM12,000,000                                  |
| Granite reserve                     | : 188,000,000 tonnes as at December 2010        |

Production of aggregates in tonnes for the past five(5) years is as follows:

| Types                                   | 2006    | 2007    | 2008    | 2009    | 2010    |
|---|---------|---------|---------|---------|---------|
| Aggregate 3/8"                          | 28,000  | 44,000  | 50,000  | 56,000  | 29,000  |
| Aggregate <sup>3</sup> / <sub>4</sub> " | 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 (5) years are as follows:

|                          | 2006  | 2007  | 2008  | 2009  | 2010  |  |
|--------------------------|-------|-------|-------|-------|-------|--|
| Average price (RM/tonne) | 15.04 | 13.56 | 14.52 | 12.38 | 13.80 |  |

TypesRM/tonneBlasting0.82Transportation1.30Royalty1.15Crushing3.40Administration0.45

The average production cost per tonne is as follows:

Buildings on site are as follows:

| Buildings       | Buildings Construction                                       |        |
|-----------------|--|--------|
| Office          | 2-storey of permanent<br>construction of fair condition      | 8,200  |
| Workshop        | Open sided of steel portal frame of fair condition           | 12,000 |
| Explosive store | 1-storey of permanent<br>construction of fair condition      | 560    |
| Canteen         | 1-storey of permanent<br>construction of fair condition      | 1,200  |
| Guardhouse      | 1-storey of semi-permanent<br>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.

By using an appropriate method(s) of valuation, you are requested to:

Value the subject property for financing purpose.

(25 marks)

Q4 Hanan Latex Bhd owns a plantation, which is located in the Bernam District of Selangor. The plantation is accessible for 20 kilometers via a secondary road from the nearest town. It is undulating in nature and is provided with proper maintenance, access together with drainage and irrigation system.

It is cultivated as follows:

| Block | Acreage (Acre) | Plantation<br>Material | Year planted |
|-------|----------------|------------------------|--------------|
| A     | 130            | <b>RRIM 600</b>        | 1983         |
| В     | 120            | RRIM 500               | 1994         |
| С     | 110            | PB 50                  | 1979         |

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| Block | RSS Production (KG) |         |         |  |
|-------|---------------------|---------|---------|--|
|       | 2010                | 2009    | 2008    |  |
| Α     | 128,000             | 129,000 | 130,000 |  |
| В     | 115,600             | 110,000 | 108,000 |  |
| С     | 94,000              | 95,000  | 100,000 |  |

The production figures of RSS for the last three years are as follows:

The market price per kg RSS is RM 3.50. Production cost per kg. is 40% of the market price. Economic life for rubber is 30 years. Vacant land suitable for rubber cultivation is RM5,000.00 per acre. The land is under freehold title. Hanan Latex Bhd has requested you to value its property for financing purpose.

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

| (a) | Value the subject property by using the comparable method                | (7 marks)  |
|-----|--|------------|
| (b) | Value the subject property by using the income method                    | (15 marks) |
| (c) | <b>Propose</b> your own opinion of value derivation based on both above. | methods    |

(3 marks)

Q5 You have been approached by the SB Group, Ltd, the owner of SHAB golf course to value their properties for financing purposes.

The subject property consists of an 18-hole private country club which includes a swimming pool (four lanes), outdoor tennis courts (four), a children's playground – with wading pool, and ancillary golf course amenities like a driving range and putting green. The subject property is treated as being owned in fee simple, the actual ownership is structured around and Limited Liability Corporation (LLC). Currently the subject property has around 228 golf memberships (of those 110 are equity members) and 55 social members. The club's goal is to have 250 golf memberships. A major aspect of the club is the Clubhouse.

The clubhouse is masonry constructed, in stages (circa 1940-1970). The golf course has 18 holes, some with multiple tees. It is well designed and excellently maintained with a double row irrigation system. It does not appear to be any safety issues associated with the golf course design. Land area is of 151.44 acres.

| Details      | Sale no 1 | Sale no 2   | Sale no 3  | Sale no 4  | Sale no 5 | Sale no 6 |
|--------------|-----------|-------------|------------|------------|-----------|-----------|
| Location     | SL Golf   | DC Golf     | Park       | RA Golf    | RM Golf   | SR Golf   |
|              | Course    | Course      | District   | Course     | Course    | Course    |
| Sales Price  | 3,190,000 | 3,000,000   | 1,400,000  | 4,127,000  | 3,000,000 | 3,000,000 |
| Date of Sale | Jan-99    | Aug-99      | Sept-00    | Nov-99     | Oct-00    | May-99    |
| Land Area    | 208       | 144.31      | 50         | 160        | 173.14    | 237       |
| (acres)      |           |             |            |            |           |           |
| Slope        | 115 (ave) | 122         | 113        | 127        | 109       | 121       |
| Rating       |           |             |            |            |           |           |
| Course       | 69.5 (ave | 72.4        | 68         | 72         | 67.4      | 71        |
| Rating       |           |             |            |            |           |           |
| Yardage      | 6,558     | 6,755       | 3,200      | 6,859      | 5,991     | 6,103     |
| Driving      | No        | Yes         | No         | Yes        | No        | No        |
| Range        |           |             |            |            |           |           |
| Fees         | 19.00 w-  | 19.00 w-day | 8.00 w-day | 33.00 /    | 23.00 /   | 32.00 /   |
|              | day       | 25.00 w-    | 9.00 w-end | 38.00      | 30.00     | 39.00     |
|              | 26.00 w-  | end         | Cart:      |            | (cart     | (carts    |
|              | end       |             | 6/person   |            | included) | included) |
| Comments     | A 27-hole | An 18-hole  | A 9-hole   | An 18-hole | A 27-     | An 18-    |
|              | located:  | located:    | located:   | located:   | hole.     | hole      |
|              | southern  | southern    | southern   | northeast  | Construct | Construct |
|              | suburbs.  | suburbs.    | suburbs.   | suburbs.   | ed in     | ed in     |
|              | 1971      | 1972        | 1989       | Constructe | 1930.     | 1994.     |
|              | vintage.  | vintage.    | vintage.   | d in 1990  | _         |           |

Transaction data on the properties are as follows:

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The unaudited 2009 and 2010 income and expense statements for the subject property are as Table 5.1 and Table 5.2 below:

|                           | 12/31/2010 | 12/31/2009 | Ave. increase / |
|---------------------------|------------|------------|-----------------|
| Income                    | (RM)       | (RM)       | decrease (%)    |
| Income fees               | 95,227     | 70,710     | 34.7%           |
| Member Dues -Golf         | 958,233    | 705,591    | 35.8%           |
| Member Dues -Social       | 58,665     | 47,588     | 23.3%           |
| Green fees                | 124,487    | 105,083    | 18.5%           |
| Cart Rentals              | 226,002    | 215,589    | 4.8%            |
| Range Fees                | 31,945     | 1,100      | 2804.1%         |
| Convinient Cart -Food     | 5,987      | 5,731      | 4.5%            |
| Convinient Cart -Beverage | 3,198      | 2,697      | 18.6%           |
| Club Storage              | 30,288     | 478        | 6236.4%         |
| Locker Annual Rental      | 60,180     | 3,375      | 1683.1%         |
| CCC Sales                 | 7,891      | 9,017      | -12.5%          |
| Trail Fees                | 5,050      | 4,216      | 19.8%           |
| Pool Guest fees           | 580        | 348        | 66.7%           |
| Merchanise Sales          | 127,710    | 131,615    | -3.0%           |
| Dining Room Sales         | 260,202    | 244,602    | 6.4%            |
| Dining Beverage Sales     | 63,500     | 67,898     | -6.5%           |
| Banquet Room rental       | 30,122     | 17,745     | 69.7%           |
| Banquet Food Sales        | 248,674    | 164,175    | 51.5%           |
| Banquet Beverage Sales    | 127,208    | 106,699    | 19.2%           |
| Banquet Food - Tax Exempt | 50,713     | 18,582     | 172.9%          |

| Table 5.1: The unaudited income for the second se | he year 2009 and | d year 2010. |
|---|------------------|--------------|
|---|------------------|--------------|

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| Banquet Beverage - Tax Exempt | 11,672    | 4,031     | 189.6% |
|-------------------------------|-----------|-----------|--------|
| Tournament Greens Fees        | 82,890    | 79,330    | 4.5%   |
| Tournament Cart Rentals       | 17,253    | 18,531    | -6.9%  |
| Tournament Food Sales         | 32,153    | 39,536    | -18.7% |
| Tournament Beverage           | 13,050    | 15,907    | -18.0% |
| Halfway House Food Sales      | 42,116    | 35,650    | 18.1%  |
| Halfway House Beverage Sales  | 3,191     | 3,315     | -3.7%  |
| Miscellaneous Income          | 54,166    | 57,347    | -5.5%  |
| Total Income                  | 2,772,353 | 2,176,486 | 27.4%  |

| Table 5.2: The unaudited | operating expenses for the | year 2009 and year 2010. |
|--------------------------|----------------------------|--------------------------|
|                          |                            |                          |

|                                       | 12/31/2010 | 12/31/2009 | Ave. increase / |
|---------------------------------------|------------|------------|-----------------|
| Operating Expenses                    | (RM)       | (RM)       | decrease (%)    |
| Property Tax                          | 141,533    | 132,547    | 6.8%            |
| Insurance                             | 52,346     | 26,184     | 99.9%           |
| General & Administrative              | 264,162    | 208,384    | 26.8%           |
| clubhouse Maintenace                  | 310,143    | 176,006    | 76.2%           |
| Food & Beverage                       | 409,078    | 344,588    | 18.7%           |
| Membership                            | 8,084      | 11,394     | -29.1%          |
| Legal & Professional                  | 10,903     |            |                 |
| Greens Fees                           | 151,314    | 118,580    | 27.6%           |
| Course Maintenance                    | 487,197    | 369,266    | 31.9%           |
| Carts                                 | 91,365     | 91,761     | -0.4%           |
| Range                                 | 3,459      | 1,417      | 144.1%          |
| Locker Room                           | 81,343     | 61,652     | 31.9%           |
| Pro Shop                              | 13,921     | 18,853     | -26.2%          |
| Pool                                  | 26,260     | 29,995     | -12.5%          |
| Tennis                                | 2,852      | 2,737      | 4.2%            |
| Cost of Sales (merchanise, food, etc) | 413,784    | 346,148    | 19.5%           |
| Total Expenses                        | 2,467,744  | 1,939,512  | 27.2%           |

The capitalisation rate of interest of the subject property is 10%.

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

| (a) | Value the subject property by using the comparable method                | (10 marks)           |
|-----|--|----------------------|
| (b) | Value the subject property by using the income method                    | (12 marks)           |
| (c) | <b>Propose</b> your own opinion of value derivation based on both above. | methods<br>(3 marks) |
|     |  | (5 111411            |

Q6a The property development comprises a block of shops, in total 110 m frontage by 25 m depth (gross), with first floor offices 110 m by 25 m (gross).

The following information is also available:

|        | : 2 years                        |
|--------|----------------------------------|
| net:   |                                  |
| Zone A | : RM520 (5 m depth)              |
|        | : RM230                          |
|        | : 8.5%                           |
|        | : 15% of Gross Development Value |
|        | : RM 4,000,000                   |
|        | : 4% of purchase price           |
|        | : 16% per annum                  |
|        | et:<br>Zone A                    |

Maximum building costs should be expressed as RM X per sq.m (gross) on the assumption that the offices will cost 40% more per sq.m than the shops. Based on the available data above, you are requested to:

**Calculate** the maximum building costs permissible for the proposed development to be viable.

10 marks)

Q6b A housing developer wishes to purchase freehold land for RM1 500 000 to build 110 bungalows. The housing development scheme would take one year to complete and 30 bungalows could be sold after 6 months, a further 50 after 9 months and 30 on completion.

The following information has been established:

| Incidental costs of land acquisition<br>Gross floor area of each bungalow | : 4 % of purchase price<br>: 82 sq.m   |
|---|--|
| Building costs (including site works and                                  | : RM550 psm (assume an even  |
| contingencies)  | distribution over the building period)   |
| Quantity surveyor's and architect's fees                                  | : 10% of building costs (60% to be<br>paid at commencement and 40% on<br>completion) |
| Estate agency, legal fees etc.,<br>Cost of financing                      | : 4% of sale price<br>: 1% per month   |

The housing developer requires a pre-tax profit of RM750,000. By using a monthly cash flow, you are requested to:

**Calculate** the minimum selling price of each bungalow permissible for the development to be viable.

15 marks)

### **END OF QUESTION PAPER**