NATIONAL UNIVERSITY OF SINGAPORE

RE3101 – ADVANCED REAL ESTATE VALUATION

(Semester I: AY2012-13)

Time Allowed: 2 Hours

INSTRUCTIONS TO CANDIDATES

1.   This examination paper contains **THREE** questions and comprises **FOUR** printed pages.

2.   Answer **ALL** questions.

3.   The marks for each question are shown in brackets and add up to 100.

4.   This is an OPEN BOOK examination.

5.   The examiner for this module is Mr Cheng Fook Jam.

Question 1 (40 marks)

In July 2012, a 99-year leasehold residential plot (Site A) attracted 7 bids as shown below:

S/No	Land Bid per sq m of Gross Floor Area (GFA)
1	$7,150
2	$6,078
3	$5,774
4	$5,500
5	$5,335
6	$5,228
7	$5,225

Another plot (Site B), sold in August 2012, garnered 9 bids as follows:

S/No	Land Bid per sq m of Gross Floor Area (GFA)
1	$5,486
2	$5,377
3	$5,323
4	$5,270
5	$5,250
6	$5,093
7	$5,042
8	$5,037
9	$4,988

The descriptive statistics of the bidding data pertaining to Site A and Site B are consolidated in the following table:

Descriptive Statistics	Site A	Site B
Average	$5,756 per sq m of GFA	$5,207 per sq m of GFA
Median	$5,500 per sq m of GFA	$5,250 per sq m of GFA
Standard Deviation	$638 per sq m of GFA	$164 per sq m of GFA
Coefficient of Variation	0.11	0.03
Money-on-Table	1.18	1.02
Maximum/Minimum	1.37	1.1

Another plot of land (Site C) in the vicinity is comparable to Site A and Site B in all pertinent attributes such as location, tenure, plot ratio, permitted use, land area, and physical features. Market analysis also suggests that land price movement is generally stable during the third quarter of 2012.

Based on the bidding data, the open market value of Site C as at 1 Sep 2012 was estimated by an analyst at $5,375 per sq m of GFA, being the average of the 2 median land bids of $5,500 per sq m of GFA and $5,250 per sq m of GFA.

The rationale of the above approach was stated as follows: "Using the average of the 2 median land bids per sq m of GFA is the most suitable methodology to determine the open market of Site C because outliers in the form of extremely high or ridiculously low bids are disregarded in the valuation process."

Evaluate the validity of the above statement in the context of how a valuer should extract the information content of bidding data to appraise the open market value of land via the Direct Comparison Method.

Question 2 (30 marks)

Merlin Industrial Trust is planning to acquire a 37-year leasehold industrial property. The forecasted net operating rental incomes (NOIs) of the property over a 10-year horizon are shown below:

Year	NOI ($)
1	950,000
2	1,230,000
3	1,230,000
4	1,230,000
5	1,344,054
6	1,344,054
7	1,344,054
8	1,468,684
9	1,468,684
10	1,468,684

The NOI of $950,000 reflects the contracted rents still in force until the end of Year 1. The increased NOI in Year 2 at $1,230,000 is based on the expected market rent for that period. The forecasts for Year 3 to Year 10 also take into consideration that rental leases are typically marked to market every 3 years, and based on the assumption that rents will grow at 3% per annum.

The return on 10-year government bonds is 2.5% per annum, and the risk premium associated with industrial properties is 5%.

Suppose the above property is valued at $19 million via the direct capitalisation method as follows:

"Year 1 NOI of $950,000 capitalised at 5% = $19 million. The rack-rented initial yield for a 37-year leasehold property is computed as 5.83% (based on 7.5% required rate of return, 3-yearly rental review period, and 3% expected rental growth rate). Since the property is rented in Year 1 for $950,000 at below market rate, a lower capitalisation rate of 5% is used instead."

(a)   Identify the flaws of the above valuation approach.

(10 marks)

(b)   Demonstrate an appropriate method to estimate the open market value of the property in connection with its acquisition by Merlin Industrial Trust.

(20 marks)

Question 3 (30 marks) - Answer Part A or Part (B)

Part A

"Given that the hospitality business is one that synergises the provision of space and services, the valuation of brick-and-mortar real estate that forms part of the business is therefore challenging. This is so because it is well nigh impossible to disaggregate the total business revenue accurately to the various factors of production, such as entrepreneurial talent, branding and franchising. Along this line, the open market valuation of a hotel should therefore be undertaken by a team of professionals comprising a valuer as well as an expert well versed in the interpretation of financial statements."

Do you agree with the above view? Why?

(30 marks)

OR

Part (B)

"In a market characterised by 'irrational exuberance', valuers should not invoke the Direct Comparison Method to estimate the open market value of real estate assets as they would inadvertently fuel the bubble by relying on recently transacted prices as well as current asking prices. Valuers should instead consider only the long-run fundamentals to determine the intrinsic worth of properties rather than the extrinsic motivations underlying value-in-exchange."

Do you agree with the above view? Why?

(30 marks)

END OF PAPER