



**Schulich**  
School of Business  
York University

# BBA TEST AND EXAMINATION PAPERS

## SESSION W2011

COURSE  
ACTG 2020.030

**Final Examination, V,W**

Actg. 2020 V & W – Final Examination – S. Hsu – Winter 2011

**YORK UNIVERSITY**

**SCHULICH SCHOOL OF BUSINESS**

**ACCOUNTING 2020 V & W**

**FINAL EXAMINATION**

**April 7, 2011**

**PLEASE READ ALL OF THE FOLLOWING**

**MARKS:** 100 Marks

**TIME:** 180 Minutes

**INSTRUCTOR:** Sylvia Hsu

1. This is a closed book examination. No notes or other aids are permitted in the exam, except for a calculator with only mathematical functions. Calculators that store text are not permitted. Use only paper provided at the exam. If you require paper for rough work, use an exam booklet.

2. The exam has 4 questions. You must answer them all. The exam has 7 pages (including the cover page). Make sure you have them all.

3. Please use ink and write on every **other** line – do **not** write on unlined pages. **(There is a 4-mark penalty if you do not do so!!)**

4. Please enclose the examination with your responses -- also enclose all books given to you.
5. Number each book; 1 of X, 2 of X, 3 of X, etc.
6. Please do not leave the room without the proctor's knowledge.
7. Do not communicate with anyone except the proctor.
8. Make any required assumptions; proctors are not permitted to interpret questions.
9. Please do not write your name on the examination booklets. Identify yourself with your student number and your section only.

## **GOOD LUCK!**

### **QUESTION 1** (42 marks; 75 minutes)

Monica Appleby manages Lakeside Suites, a hotel in Oakville. Lakeside Suites has a capacity of 320 suites and offers a small, but well-managed, conference centre. Since opening, Lakeside Suites has established a good reputation among small and medium-sized business clients as a nice place to hold annual meetings and conferences. Monica is currently in a quandary regarding hotel bookings for the last weekend in February. One of Lakeside's long-standing clients, Reginald Printing, recently called Monica about the possibility of holding its annual three-day sales conference at the end of February. Reginald wants to reserve 75 rooms each day (= 225 total room days). Per its usual arrangement, Reginald would pay \$120 per day per room and \$5,000 per day for use of the convention centre. Because this is a bulk booking, the room rate is lower than the normal rate of \$150 per day. Like most clients, however, the Reginald attendees would spend additional money at the hotel; Monica expects this miscellaneous revenue to be \$25 per person per day.

Shortly after receiving the call from Reginald, Monica received a call from Margucci Original Designers. Margucci, a prospective first-time client, wants to hold its annual three-day fashion event at Lakeside Suites at the end of February. Margucci would book 225 suites per day (for a total of 675 room days) and is willing to pay \$120 per suite per day. Monica predicted Lakeside Suites could earn additional revenues of \$25 per person per day on food, laundry, and other incidental charges from Margucci attendees similar to individual customers. Also, Margucci would be willing to pay the normal daily rate of \$5,000 for use of the convention centre, although it wants Monica to construct a runway at a cost of \$3,000. Monica was ecstatic to receive the Margucci call until she realized that the dates Margucci wants coincide with Reginald's annual sales meeting.

Trying to figure a way out, Monica calls both Margucci and Reginald to see if either party would be willing to move its event to different dates. However, both Margucci and Reginald are committed to holding their respective events at the end of February. Next, Monica looks at her reservations chart to see if she can hold both events. She realizes that 60 suites are already committed to other individual clients during that time. Monica believes strongly that she must honour these reservations.

Monica provides you with the following summary financial data for a typical month of operations.

**QUESTION 1** (Cont'd.)

<b><i>Summary Financial Data for a Typical Month of Operations</i></b>	
Number of occupied suite-days	6,000
Average suite rate	\$130
<i>Revenue:</i>	
Suites	\$780,000
Food, telephone, movies, and other incidentals	150,000
Convention centre	75,000
Total revenues	\$1,005,000
<i>Variable Costs:</i>	
Food, laundry, supplies, telephone, and movies	\$180,000
Labour (kitchen help, cleaning staff)	210,000
<b>Contribution margin</b>	<b>\$615,000</b>
<i>Fixed costs:</i>	
Labour (hotel management)	\$125,000
Building and grounds	350,000
Profit before taxes	\$140,000

Monica also informs you that if she chooses Reginald, she is likely to sell another 57 suites to individual parties for each of the three days at the standard rate of \$150 per suite. If she accepts Margucci, she will be able to sell the remaining 35 suites to individual parties for each of the three days at the standard rate of \$150 per suite. Monica usually pays hourly staff overtime premium when the hotel is at 100% occupancy rate. As booking Margucci would cause an abnormally high occupancy rate, Monica anticipates the need to pay her hourly staff an overtime premium of 50% for the three-day period.

**Required:**

- Identify Monica's decision options and prepare a financial analysis, explaining which option maximizes profits. (22 marks)
- Provide your recommendation based on the financial analysis in (a) and an evaluation of qualitative factors. (12 marks)
- Suppose 75 and 225 suites per day is the number of suites that Reginald and Margucci wish to block for their conventions. However, the actual demand associated with the booking of Reginald and of Margucci might be less than this estimate. While Reginald is sure to occupy at least 60 suites, Margucci estimates that total demand might range from 150 to 225 suites. Because actual demand would not be known until late, Monica would not be able to fill unused suites with paying guests. With appropriate calculation, explain how this information might affect your recommendation provided in (b). (8 marks)

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### **QUESTION 2** (20 marks; 30 minutes)

Universal System assembles PCs and uses flexible budgeting and a standard cost system. Universal System allocates overhead based on the number of direct materials parts. The company's performance report includes the following selected data:

	<b>Static Budget (20,000 PCs)</b>	<b>Actual Results (22,000 PCs)</b>
Sales (20,000 PCs x \$400) (22,000 PCs x \$420)	<u>\$8,000,000</u>	<u>\$9,240,000</u>
Variable manufacturing expenses:		
Direct materials (200,000 parts x \$10.00) (214,200 parts x \$9.80)	2,000,000	2,099,160
Direct labour (40,000 hr x \$14.00) (42,500 hr x \$14.60)	560,000	620,500
Variable overhead (200,000 parts x \$4.00) (214,200 parts x \$4.10)	800,000	878,220
Fixed manufacturing expenses:		
Fixed overhead	<u>900,000</u>	<u>930,000</u>
Total cost of goods sold	<u>4,260,000</u>	<u>4,527,880</u>
Gross profit	<u>\$3,740,000</u>	<u>\$4,712,120</u>

#### **Required**

- Describe how Universal System's managers can benefit from the standard costing system. (4 marks)
- Prepare a flexible budget of COGS based on the actual number of PCs sold. Have Universal System's managers done a good job or a poor job controlling material and labour costs? Why? (12 marks)
- Compute the quantity variances for direct materials and direct labour. (4 marks)

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### **QUESTION 3** (22 marks; 40 minutes)

Each autumn, as a hobby, Katherine Middleton weaves cotton placemats to sell at a local crafts shop. The mats sell for \$20 per set of four. The shop charges a 10% commission and remits the net proceeds to Middleton at the end of December. Middleton has woven and sold 25 sets each of the last two years. She has enough cotton in inventory to make another 25 sets. She paid \$7 per set for the cotton. Middleton uses a four-harness loom that she purchased for cash exactly two years ago. It is depreciated at the rate of \$10 per month. The accounts payable relate to the cotton inventory and are payable by September 30.

Middleton is considering buying an eight-harness loom so that she can weave more intricate patterns in linen. The new loom costs \$1,000; it would be depreciated at \$20 per month. Her bank has agreed to lend her \$1,000 at 6 % interest, with \$200 principal plus

accrued interest payable each December 31. Middleton believes she can weave 15 linen placemats sets in time for the Christmas rush if she does not weave any cotton mats. She predicts that each linen set will sell for \$50. Linen costs \$18 per set. Middleton's supplier will sell her linen on credit, payable December 31.

Middleton plans to keep her old loom whether or not she buys the new loom. The balance sheet for her weaving business at August 31 is as follows:

<b>KATHERINE MIDDLETON, WEAVER</b>			
<b>Balance Sheet</b>			
<b>August 31</b>			
Current assets:		Current liabilities:	
Cash	\$ 25	Accounts payable	\$ 74
Inventory of cotton	175		
	<u>200</u>		
Fixed assets:		Owner's equity:	
Loom	500		386
Accumulated depreciation	(240)		
	<u>260</u>		
Total assets	<u>\$460</u>	Total liabilities and owner's equity	<u>\$460</u>

**Required**

a. Prepare a combined cash budget for the four months ending December 31, for two alternatives: (i) weaving the placemats in cotton using the existing loom and (ii) weaving the placemats in linen using the new loom. For each alternative, prepare a budgeted income statement for the four months ending December 31. (16 marks)

b. When Katherine reviews the budgeted statements you prepared in part (a), what other factors does she need to consider before buying the new loom? (6 marks)

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**QUESTION 4** (16 marks; 30 minutes)

Gokart Corporation (GC), a subsidiary of New Concept Industries, manufactures go-carts and other recreational vehicles, which mainly are sold to recreational centres. GC has been receiving some pressure from New Concept's management to diversify into some of these other recreational areas. The recent trend for recreational centres is to feature not only go-cart tracks but miniature golf, batting cages, and arcade games. Game Leasing Inc. (GLI), one of the largest firms that leases arcade games to family recreational centers, is looking for a friendly buyer. New Concept's top management believes that GLI's assets could be acquired for an investment of \$3.2 million and has strongly urged Matt Frieco, division manager of GC, to consider acquiring GLI.

New Concept Industries traditionally has evaluated all of its divisions on the basis of return on investment. The desired rate of return for each division is 20 percent. The management

team of any division reporting an annual increase in the ROI is automatically eligible for a bonus. The management of divisions reporting a decline in the ROI must provide convincing explanations for the decline in order to be eligible for a bonus. Moreover, 50 percent of the bonus is paid to divisions reporting an increase in ROI.

Frieco has reviewed GLI's financial statements with his controller, Dona Connelly, and they believe the acquisition may not be in the best interest of GC. "If we decide not to do this, the New Concept people are not going to be happy," said Frieco. "If we could convince them to base our bonuses on something other than return on investment, maybe this acquisition would look more attractive. How would we do if the bonuses were based on residual income, using the company's 15 percent cost of capital?"

In the following table are condensed financial statements for both GC and GLI for the most recent year.

	<b>GLI</b>	<b>GC</b>
Sales revenue	-----	\$9,500,000
Leasing revenue	\$3,100,000	-----
Variable expenses	(1,300,000)	(6,000,000)
Fixed expenses	(1,200,000)	(1,500,000)
Operating income	\$ 600,000	\$2,000,000
Current assets	\$1,900,000	\$2,300,000
Long-lived assets	1,100,000	5,700,000
Total assets	\$3,000,000	\$8,000,000
Current liabilities	\$ 850,000	\$1,400,000
Long-term liabilities	1,200,000	3,800,000
Stockholders' equity	950,000	2,800,000
Total liabilities and stockholders' equity	\$3,000,000	\$8,000,000

#### **QUESTION 4** (Cont'd.)

##### **Required:**

- If New Concept Industries continues to use ROI as the sole measure of divisional performance, explain why GC would be reluctant to acquire Game Leasing Inc. (4 Marks)
- If New Concept Industries could be persuaded to use residual income to measure the performance of GC, explain why GC would be more willing to acquire GLI. (4 Marks)
- Discuss how the behaviour of division managers is likely to be affected by the use of the following performance measures: (a) return on investment and (b) residual income. Please identify at least two examples of the effects on the behaviours of division managers. (8 Marks)

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