



Schulich
School of Business
York University

BBA TEST AND EXAMINATION PAPERS

SESSION W2011

COURSE

ACTG 2020.030

Final Examination, Sections R, U

ACTG2020 Final Exam (Cianflone) – Sections R, U – Winter 2011 1

YORK UNIVERSITY

SCHULICH SCHOOL OF BUSINESS

ACCOUNTING 2020 – Sections R and U

FINAL EXAM

Winter 2011

TIME: 180 Minutes

TOTAL MARKS: 85 Marks

INSTRUCTOR: Domenic Cianflone, MBA, PhD, FCMA

1. This is a closed book exam. You will not be provided with a formula sheet. Calculators that store text are not permitted. Use only paper provided at the exam. If you require paper for rough work, use the back of the exam pages. Calculations on the questions sheets will not be graded.
2. Write your name and student number on the front of each exam booklet, and number each booklet you use. Also write your name and section on the question sheet.
3. **You must hand in the question sheets with the exam. Please do not answer any questions in formal case format – point form only.**
4. The exam has **four questions and seven pages** (including the cover page). Make sure you have them all.

5. Please do not leave the room without the proctor's knowledge.
6. Do not communicate with anyone except the proctor. Make any necessary assumptions – proctors are not permitted to interpret the questions.
7. Show all calculations for part marks.

Good luck!

Question 1 (25 marks, 50 minutes)

Phoenix Management helps rental property owners find renters and charges the owners one-half of the first month's rent for this service. For August 2010, Phoenix expects to find a renter for 100 apartments with an average first month's rent of \$700. Budgeted cost data per tenant application for 2010 follow:

- Professional labour: 1.5 hours at \$20 per hour
- Credit checks: \$50

Phoenix expects other costs, including lease payment for the building, secretarial help, and utilities, to be \$3,000 per month. On average, Phoenix is successful in placing one tenant for every three applicants.

Actual rental applications in August 2010 were 270. Phoenix paid \$9,500 for 400 hours of professional labour. Credit checks went up to \$55 per application. Other support costs in August 2010 were \$3,600. The average first monthly rentals for August 2010 were \$800 per apartment unit for 90 units.

Required

1. Compute the total flexible budget variance for Phoenix's operations in August 2010. (10 marks)
2. Determine the professional labour rate and efficiency variances for August 2010. (10 marks)
3. What non-financial factors should Phoenix consider in evaluating the effectiveness and efficiency of professional labour? (5 marks)

Adapted from Cost Management – A Strategic Emphasis, Fifth Edition, by Blocher et. al, ©2010.

Question 2 (15 marks, 35 minutes)

Mitachlordion Technology, Inc. (MTI) has two divisions: Surrey and Burnaby. Surrey currently sells a diode reducer to manufacturers of aircraft navigation systems for \$1,550 per unit. Variable costs amount to \$1,000, and demand for this product currently exceeds the division's ability to supply the marketplace.

Despite this situation, MTI is considering another use for the diode reducer, namely,

integration into a satellite positioning system that would be made by Burnaby. The positioning system has an anticipated selling price of \$2,800 and requires an additional \$1,340 of variable manufacturing costs. A transfer price of \$1,500 has been established for the diode reducer.

Top management is anxious to introduce the positioning system; however, unless the transfer is made, an introduction will not be possible because of the difficulty of obtaining needed diode reducers. Surrey and Burnaby are in the process of recovering from previous financial problems, and neither division can afford any future losses. The company uses responsibility accounting and ROI in measuring divisional performance, and awards bonuses to divisional management.

Required

1. How would Surrey's divisional manager likely react to the decision to transfer diode reducers to Burnaby? Show computations to support your answer. (1 mark)
2. How would Burnaby's divisional management likely react to the \$1,500 transfer price? Show computations to support your answer. (5 marks)
3. Assume that a lower transfer price is desired. Should top management lower the price or should the price be lowered by another means? Explain. (4 marks)
4. From a contribution margin perspective, does MTI benefit more if it sells the diode reducers externally or transfers to Burnaby? By how much? (5 marks)

Adapted from: Managerial Accounting, Canadian Edition, Hilton, Favere-Marchesi, McGraw-Hill Ryerson, © 2010.

Question 3 (20 marks, 45 minutes)

The Midwest Division of the Paibec Corporation manufactures subassemblies used in Paibec's final products. Lynn Hardt of Midwest's profit planning department has been assigned the task of determining whether Midwest should continue to manufacture a subassembly component, MTR-2000, or purchase it from Marley Company, an outside supplier. Marley has submitted a bid to manufacture and supply the 32,000 units of MTR-2000 that Paibec will need for 2010 at a unit price of \$17.30. Marley has assured Paibec that the units will be delivered according to Paibec's production specifications and needs. The contract price of \$17.30 is applicable only in 2010, but Marley is interested in entering into a long-term arrangement beyond 2010.

Lynn has submitted the following information regarding Midwest's cost to manufacture 30,000 units of MTR-2000 in 2009:

Direct Material	\$ 195,000
Direct Labour	120,000
Factory space rental	84,000
Equipment leasing costs	36,000
Other manufacturing costs	225,000
Total manufacturing costs	<u>\$660,000</u>

Lynn has collected the following information related to manufacturing MTR-2000:

- Equipment leasing costs represent special equipment used to manufacture MTR-2000. Midwest can terminate this lease by paying the equivalent of one month's lease payment for each of the two years left on its lease agreement.
- Forty percent of the other manufacturing overhead is considered variable. Variable overhead changes with the number of units produced, and this rate per unit is not expected to change in 2010. The fixed manufacturing overhead costs are not expected to change whether Midwest manufactures or purchases MTR-2000. Midwest can use equipment other than the leased equipment in its other manufacturing operations.
- Direct materials cost used in the production of MTR-2000 are expected to increase 8% in 2010.
- Midwest's direct labour contract calls for a 5% wage increase in 2010.
- The facilities used to manufacture MTR-2000 are rented under a month-to-month rental agreement. Midwest would have no need for this space if it does not manufacture MTR-2000. Thus, Midwest can withdraw from the rental agreement without any penalty.

Required

1. Prepare a cost analysis that shows whether the Midwest Division should make MTR-2000 or purchase it from Marley Company for 2010. (14 marks)
2. Identify and briefly discuss the strategic factors that Midwest should consider in this decision. (6 marks)

Adapted from Cost Management – A Strategic Emphasis, Fifth Edition, by Blocher et. al, ©2010.

Question 4 (25 marks, 50 minutes)

Excalibur Inc. received an order for a piece of special machinery from Rex Company. Just as Excalibur completed the machine, Rex Company declared bankruptcy, defaulted on the order, and forfeited the 10 percent deposit paid on the selling price of \$217,500.

Excalibur's manufacturing manager identified the costs already incurred in the production of the special machinery for Rex Company as follows:

Direct Material		\$ 49,800
Direct Labour		64,200
Manufacturing Overhead		
Variable	\$ 32,100	
Fixed	16,050	48,150
Fixed selling and administrative costs		16,215
TOTAL		<u>\$178,365</u>

Another company, Kaytell Corporation, will buy the special machinery if it is reworked to Kaytell's specifications. Excalibur Inc. offered to sell the reworked machinery to Kaytell as a special order for \$205,200. Kaytell agreed to pay the price when it takes delivery in two months. The additional identifiable costs to rework the machinery to Kaytell's specifications are as follows:

Direct materials: \$18,600

Direct labour: 12,600

A second alternative available to Excalibur's management is to convert the special machinery to the standard model, which sells for \$187,500. The additional identifiable costs for this conversion are as follows:

Direct materials: \$8,550

Direct labour: 9,900

A third alternative for Excalibur is to sell the machine as is for a price of \$156,000. However, the potential buyer of the unmodified machine does not want it for 60 days. This buyer has offered a \$21,000 down payment, with the remainder due upon delivery.

The following additional information is available regarding Excalibur's operations:

- The sales commission rate on sales of standard models is 2 percent, while the rate on special orders is 3 percent.
- Normal credit terms for sales of standard models are 2/10, net/30. Most customers take the 2 percent discount. Credit terms for a special order are negotiated with the customer.
- The allocation rates for manufacturing overhead and fixed selling and administrative costs are as follows:

Manufacturing costs

Variable 50% of direct-labour cost

Fixed 25% of direct-labour cost

Fixed and selling administrative costs 10% of the total of direct material, direct labour, and manufacturing overhead costs

- Normal time required for rework is one month

Required

1. Determine the dollar contribution each of the three alternatives will add to Excalibur's before-tax profit. (10 marks)
2. If Kaytell makes Excalibur a counteroffer, what is the lowest price Excalibur should accept for the reworked machinery from Kaytell? Explain your answer. (12 marks)
3. Discuss the influence fixed manufacturing overhead cost should have on the sales price quoted by Excalibur Inc. for special orders. (3 marks)

Adapted from: *Managerial Accounting, Canadian Edition, Hilton, Favere-Marchesi, McGraw-Hill Ryerson, © 2010.*