



FACULTY OF BUSINESS ADMINISTRATION & ECONOMICS
DEPARTMENT OF ACCOUNTING, FINANCE AND ECONOMICS

ACO 311 – Managerial Accounting

Final Exam / Fall 2010

02/02/2011

Instructions:

- All Exam sheets, scratch and questionnaire are to be handed back to instructor.
- Penalty for cheating or any attempt to cheat is an “F” on the course.
- No questions are allowed.
- No cellulars are allowed.
- Round your answers to the nearest full number.

GROUP A (I, II, and III) Obligatory

I. The records of D&F Company reveal the following for 1010:

	<u>Master Budget</u>	<u>Actual Results</u>
Sales volume (in units)	<u># 30,000</u>	<u># 25,000</u>
Sales revenues	\$3,600,000	\$3,000,000
Variable costs	<u>2,160,000</u>	<u>1,930,000</u>
Contribution margin	1,440,000	1,070,000
Fixed costs (0-35,000 units)	<u>900,000</u>	<u>970,000</u>
Operating profit	<u>\$ 540,000</u>	<u>\$ 100,000</u>

Required (20%)

- a. Determine and explain the static budget variance for operating income.
- b. Determine and explain the sales-volume variance for sales revenues.
- c. Determine and explain sales-volume variance for variable costs
- d. Determine and explain the flexible budget variance for fixed costs.

II. AQ set the following standards for upholstering one of its most popular sofa:

Estimated direct materials	8.5 meters @ \$10 per meter	
Estimated direct labor	20 hours @ \$13 per hour	260

On April 12, a sofa was sold to a client. The job was completed on April 24.

Actual materials used and direct labor incurred are summarized as follows:

Estimated ^{Actual} direct materials	10.5 meters @ \$9.5 per meter	
Estimated ^{Actual} direct labor	15 hours @ \$12 per hour	180

AQ purchased 150 meters of direct materials at \$9.5 per meter for cash.. AQ isolates direct material price variance at point of purchase.

Required (15%)

- For the above job, determine and explain the price and efficiency variances for direct labor.
- Prepare the journal entry to account for the price and efficiency variances for direct labor
- Prepare the journal entry to account for the price variance for the 150 meters purchases.

III. Lubriderm Corporation has the following budgeted sales for the next six-month period:

<u>Month</u>	<u>Unit Sales</u>
June	90,000
July	120,000
August	210,000
September	150,000
October	180,000
November	120,000

There were 30,000 units of finished goods in inventory at the beginning of June. Plans are to have an inventory of finished products that equal 20% of the unit sales for the next month.

Five pounds of materials are required for each unit produced. Each pound of material costs \$8. Lubriderm does not carry any inventories of materials. Their suppliers agree on 24 hour delivery.

Required (15%)

- Prepare a purchases budget in pounds and dollars for July, August, and September.

CHOOSE 2 OUT OF THE FOLLOWING THREE GROUPS B, C and D

GROUP B (IV, V) profitability

IV. NDU is planning to hold a fundraising open-air party at one of the local country clubs. Proceeds are to help student clubs at NDU. NDU has two options for the party:

OPTION 1: *Valley View Country Club*
a. Fixed rental cost of \$1,000.
b. \$9 per person for food.
c. 10% per ticket sold.

OPTION 2: *Pine Trees Country Club*
a. Fixed rental cost of \$1,800.
b. A caterer who charges \$8.00 per person for food.

NDU has budgeted \$1,800 for administrative and marketing expenses. It plans to hire a band, which will cost another \$800. Tickets are expected to be \$30 per person. Local businesses will donate any other items required for the event.

Required (15%)

- a. On the same graph, plot the profit volume (OI) line for each of the above two options. (*Note: The following are required on your graph: Labeling of the axes, equation of each of OI lines, value at which the OI lines intersect the Y-axis, the X-axis, and each other.*)
- b. If NDU targets to raise \$30,000, what should NDU do? Defend your answer. NDU is tax exempted.

V. MM produces a single product that sells for \$80. Contribution margin ratio is 60%. The company expects total fixed costs to be \$72,000 for the next month at the projected sales level of 2,000 units. In an attempt to improve operating income, management is considering two alternative actions:

1. Management believes that a 10% reduction in the selling price will result in a 10% increase in quantity of units to be sold. (No change in variable cost per unit and in fixed costs is foreseen).
2. Management believes that a \$16,000 increase in the monthly advertising expense will result in a 20% increase in quantity of units to be sold. (No change in unit price and unit variable cost is foreseen).

Required (10%)

- a) Which of the above two alternatives is expected to improve operating income? Defend your answer.

GROUP C (VI, VII) job costing

VI. Nichols, Inc., manufactures remote controls. Currently the company uses a plant-wide rate (\$200 per labor hour) for allocating manufacturing overhead. The plant manager believes it is time to refine the method of cost allocation and has the accounting department identify three cost pools and their cost drivers:

<u>Cost Pools</u>	<u>Cost driver</u>	<u>Allocation Rate</u>
Material handling	Number of parts	\$2 per part
Assembly	Direct labor hours	\$20 per hour
Inspection	Time at inspection station	\$2 per minute

Production takes place in jobs of 500 units. Each job requires 1,000 parts, 10 direct labor hours, and 15 minutes of inspection time. Data for the most recent year showed that actual manufacturing overhead per job averaged \$2,200.

Required (15%)

- Calculate underallocated or overallocated overhead under each of the current system and the proposed one.
- Which system of allocation do you recommend? Why?

VII. Accounting records of PM & Co., reveal the following:

	Labor Incurred	Computer Hours Used
Job 1	\$ 4,000	480
Job 2	2,800	336
Job 3	3,500	420
Job 4	12,250	1,470
Job 5	1,250	150
Indirect labor	4,100	
Total Computer Hours		2,856

Other indirect costs incurred amounted to \$18,600. Overhead is applied to individual jobs at a rate of \$5 per computer hour. Any overallocated or underallocated overhead is charged to cost of good sold. Jobs completed and delivered to customers were jobs 1, 2, and 3.

Required(10%)

Journalize the entries to record the above transactions. Include the entry to dispose of any overallocated or underallocated overhead.

GROUP D (VIII, IX) process costing

VIII. At May 1, 2010, 3,500 units were $\frac{1}{5}$ completed in Department 2. During May, 10,500 units ^{added} entered the department from Department 1. During May, the units in process at the beginning of the month were completed. Of the 10,500 units, 7,800 units were 100% completed and 2,700 units were $\frac{1}{3}$ completed. The equivalent units of production with respect to conversion costs for May for Department 2 were completed as follows:

To process units in inventory on May 1 (3,500 x $\frac{1}{5}$)	700
To process units started and completed in May (10,500-3,500)	7,000
To process units started and completed in May (2,700 x $\frac{1}{3}$)	900
Equivalent units of production	8,600

No materials are added in Department 2.

Required (10 pts)

a) How many errors can you find in the above computation? (Assume FIFO method.)

IX. CC produces its single product in one department. The debits to Work in Process for March 2010, together with information concerning production, are as follows:

	Units	Degree of Completion	Materials Costs	Conversion Costs
WIP, Beginning	4,500	$\frac{3}{5}$	\$98,070	\$139,660
Added during period	18,200		\$410,410	\$586,140
WIP, Ending	4,000	$\frac{1}{10}$		

Materials are added at the beginning of the process, and average cost method is used to cost inventories.

Required (15 pts)

a) Prepare all entries to account for all the events that occurred during March 2010.

THE DEBATE CLUB

G O O D L U C K