

ACO 311 – Managerial Accounting

Final Exam / Summer 2010

07/08/2010

120 minutes

Instructions:

- All Exam sheets, scratch and questionnaire are to be handed back to instructor.
- Cheating or any attempt for cheating is penalized "F on the course."
- No questions are allowed.
- No cellular are allowed.
- Round your answers to the nearest full number.

I. Safe Travel Agency specializes in flights between Dubai and Beirut. It books passengers on Bon Voyage Airlines. Bon Voyage Airlines charges passengers \$500 per round trip ticket. Safe Travel Agency has the following revenue and cost structures:

| | |
|---------------------------------|-----------------|
| Commission earned per ticket | 10% |
| Variable operating costs | \$20 per ticket |
| Fixed operating costs per month | \$4,500 |

50
20 30

Safe Travel does not carry any interest-bearing debt.

Required (20%)

- a) What is Safe's operating income function in terms of the company's contribution margin?
- b) Plot Safe's OI function on a graph. Indicate (support your answer) on the graph the following points:
 - i. Point A: when no tickets are sold.
 - ii. Point B: When operating income is zero.
- c) Calculate the number of tickets to be sold each month if Safe's target net income is \$2,500 per month. Safe is subject to 20% income tax. What is Safe's safety margin at this level of sales?

II. HR Electronics specializes in replacing hard discs for laptops. It uses a standard costing system on wage rate and standard labor hours to replace the discs. The following partial information is available for the month of April:

| | |
|--|---------------|
| Standard direct labor rate | \$30 per hour |
| Actual hours of direct labor hours input | 1,000 |
| Direct labor flexible budget variance | \$3,500 F |
| Direct labor price variance | \$1,000 U |

Required (18%)

- Calculate actual direct labor rate per hour.
- Calculate direct labor hours allowed for actual output achieved during April.
- Record the journal entry required to account for direct labor price variance and direct labor efficiency variance.

III. Excel Inc., manufactures and sells a special automotive part. The following were budgeted and actual figures for the year ended December 31, 2009:

| | Budgeted | Actual |
|-------------------------------------|-------------|-------------|
| Units sold | 600,000 | 650,000 |
| Revenues | \$2,100,000 | \$3,575,000 |
| Variable costs | \$1,200,000 | \$2,575,000 |
| Fixed costs (500,000-700,000 units) | \$600,000 | \$700,000 |

Required (15%)

- Construct a flexible budget for Excel for the 650,000 unit sold.
- Calculate the sales volume variance for operating income.
- Calculate the flexible budget variance for variable costs.
- Calculate the static budget variance for revenues.

IV. Hansell Company wants to prepare budgets for one of its products, duraflex, for July 2010: the following are expected sales that were reported for six month period ended September 30, 2010:

| April | May | June | July | August | September |
|-------|-------|-------|-------|--------|-----------|
| 4,000 | 5,000 | 5,500 | 6,000 | 7,000 | 8,000 |

The production of each unit of duraflex requires 4 pounds of dura-1000 (at an expected cost of \$1.25 per pound) and 2 pounds of flexplas (at an expected cost of \$5.00 per pound). The firm's policy is to maintain a finished goods ending inventory each month equal to 10% of the following month's budgeted sales. Hansell has a zero inventory policy for direct materials because of highly dependable suppliers.

Required (15%)

Bud Sales 6000
 Add End Inv 10/ 7000
 Less Beg Inv 10/ 6000
 Produced 7000

- 8) Prepare the direct materials purchase budget for July in pounds and dollars.
 9) Consider the following direct material (upholstering material) standards per unit of a special line of chairs:

Direct materials 2 square yards at \$10 per square yard

The following data are also available:

| | |
|--|---------------------------------|
| Budgeted production | 22,000 |
| Actual units produced | 20,000 chairs |
| Direct materials purchased (for cash) and used | 41,000 yards @ \$10.60 per yard |
| Beginning inventory of DM | 0 units |

Required (15%)

- a) Fill in the following performance report for DM (show all relevant calculations):

| | Actual Results | Flexible Budget Variance | Flexible Budget | Sales Volume Variance | Master Budget |
|---------|----------------|--------------------------|-----------------|-----------------------|---------------|
| DM cost | | | | | |

- b) Record the journal entry required to account for direct material price variance.

- 9) HiFi Company uses a job costing system and it adjusts over- or under-allocated overhead by prorating any amount of over- or under-allocated overhead among ending work in process, finished goods and cost of goods sold. The following data is available for 2006:

| | |
|-------------------------------------|-------------|
| Budgeted manufacturing overhead | \$2,800,000 |
| Budgeted machine-hours | 200,000 |
| Actual manufacturing overhead costs | \$2,910,000 |
| Actual machine-hours | 200,000 |
| Beginning inventories (WIP, FG) | 0 |
| Direct material used | \$1,000,000 |
| Direct labor costs incurred | 500,000 |
| COGM | 4,000,000 |
| COGS | 3,000,000 |

Required (20%)

- a) What are the ending balances (before proration) in WIP, FG, and COGS? Show all calculations.
 b) Was manufacturing overhead over or under-allocated? Why?
 c) Journalize the entry required to dispose of any under- or over-allocated manufacturing overhead.