Examination: Management Accounting 11066 **Winter semester: 2009/10**
Examiner: Luhmer
Duration: 60 minutes

Name: ____________________ **Matriculation number:** __________

The following aids can be used: Calculator, English language dictionary

A total of 60 points can be achieved. You are advised to base your time allocation on the points indicated at the questions. Please answer each question in the space immediately below the question. Additions written elsewhere will not be recognized. All of the following 10 questions are to be answered. Check whether you received the complete set of 6 pages with 10 questions.

Questions:

1. When 50,000 units are produced the fixed cost is $10 per unit. What are the fixed costs per unit, when 100,000 units are produced? (2 points)

   Fixed Costs per unit =

2. DaSilva Manufacturing provided the following information for last month.

Sales	$10,000
Variable costs	3,000
Fixed costs	5,000
Operating income	$2,000

   If sales double next month, what is the projected operating income? (2 points)

   Projected Operating Income =

3. Tire and Spoke Manufacturing currently produces 1,000 bicycles per month. The following per unit data apply for sales to regular customers:

Direct materials	$50
Direct manufacturing labor	5
Variable manufacturing overhead	14
Fixed manufacturing overhead	10
Total manufacturing costs	$79

   The plant has capacity for 3,000 bicycles and is considering expanding production to 2,000 bicycles. What is the per unit cost of producing 2,000 bicycles? (3 points)

   Per unit cost =

4. Pederson Company reported the following:

Manufacturing costs	$2,000,000
Units manufactured	50,000
Units sold	47,000 units sold for $75 per unit

   What is the amount of gross margin? (2 points)

   Amount of gross margin =

5. Karen Hefner, a florist, operates retail stores in several shopping malls. The average selling price of an arrangement is \$30 and the average cost of each sale is \$18. A new mall is opening where Karen wants to locate a store. The mall operator offers the following three options for its retail store rentals:

1. paying a fixed rent of \$15,000 a month,
2. paying a base rent of \$9,000 plus 10% of revenue received, or
3. paying a base rent of \$4,800 plus 20% of revenue received up to a maximum rent of \$25,000.

Required:

a. For each option, compute the breakeven sales quantity and the monthly rent paid at break-even. (9 points)

b. Beginning at zero sales, show the sales levels at which each option is preferable up to 5,000 units. You may add a picture on the reverse side. (13 points)

Answer:

6. Moira Company has just finished its first year of operations and must decide which method to use for adjusting cost of goods sold. Because the company used a budgeted indirect-cost rate for its manufacturing operations, the amount that was allocated ($435,000) to cost of goods sold was different from the actual amount incurred ($425,000).

Ending balances in the relevant accounts were:

Work-in-Process	$ 40,000
Finished Goods	80,000
Cost of Goods Sold	680,000

Required:

Determine Cost of goods sold and the ending balances of Work-in-Process and Finished Goods after adjusting for overallocated overhead if

a. the difference between allocated and actual overhead is directly written off to Cost of Goods Sold (2 points)

b. the difference between allocated and actual overhead is prorated to ending account balances. (6 points)

Answer:

7. Wallace Printing has contracts to complete weekly supplements required by forty-six customers. For the year 2009, manufacturing overhead cost estimates total $420,000 for an annual production capacity of 12 million pages.

For 2009 Wallace Printing decided to evaluate the use of additional cost pools. After analyzing manufacturing overhead costs, it was determined that number of design changes, setups, and inspections are the primary manufacturing overhead cost drivers. The following information was gathered during the analysis:

Cost pool	Manufacturing overhead costs	Activity level
Design changes	$ 60,000	200 design changes
Setups	320,000	4,000 setups
Inspections	40,000	16,000 inspections
Total manufacturing overhead costs	$420,000	

During 2009, two customers, Wealth Managers and Health Systems, are expected to use the following printing services:

Activity	Wealth Managers	Health Systems
Pages	60,000	76,000
Design changes	10	2
Setups	20	10
Inspections	30	38

a. Assuming activity-cost pools are used, what are the activity-cost driver rates for design changes, setups, and inspections cost pools? (3 points)

b. Using the activity-cost driver rates determined in the previous question, what is the manufacturing overhead cost estimate for *Health Systems* during 2009? (3 points)

Answer:

8. Norton's Mufflers may manufacture one of three different products, Model X, Model Y, and Model Z. Considerable market demand exists for all models. The following per unit data apply:

	Model X	Model Y	Model Z
Selling price	$80	$90	$100
Direct materials	30	30	30
Direct labor ($10 per hour)	15	15	20
Variable support costs ($5 per machine-hour)	5	10	10
Fixed support costs	20	20	20

a. If there is excess capacity, which model is the most profitable to produce? Why?
b. If machine capacity is the bottleneck, which model is the most profitable to produce? Why?

Show your calculations. (6 points)

Answer:

9. At the end of the accounting period Susan Corporation reports operating income of $30,000 and the fixed overhead cost rate is $20 per unit. Calculate the change in operating income due to production of an additional 100 units to finished goods inventory

a. under absorption costing,
b. under variable costing. (4 points)

Answer:

10. The actual information pertains to the month of August. As part of the budgeting process Alloway's Fencing Company developed the following static budget for August. Alloway is in the process of preparing the flexible budget and understanding the results.

	Actual Results	Flexible Budget	Static Budget
Sales volume (in units)	# 20,000		# 25,000
Sales revenues	$1,000,000	$	$1,250,000
Variable costs	512,000	$	600,000
Contribution margin	488,000	$	650,000
Fixed costs	458,000	$	450,000
Operating profit	**$ 30,000**	**$**	**$ 200,000**

Required:

Insert the missing $ amounts. (5 points)