Points On The Exam:

There will be approximately 315 points on the exam. Your grade on the second exam will be based on a total of 300 points. Remember, your final grade is based on 1000 points on the three exams in total.

Description Of The Exam:

The exam will contain five sections. The first section is a fill-in question, the second is a short calculation problem; the other three sections are made up of three major problems with several parts each. There are no multiple-choice questions on the exam. The five sections are valued at 25, 40, 70, 100 and 80 points. The first, second and fourth sections deal with activities and activity-based costing in some way. The third section is a job-order costing problem, which was also covered on the last exam. The final problem is a cost-volume-profit problem where solutions are determined in terms of sales dollars rather than units. Thus, although much of the exam will be related to chapters 6 (cost-activity relationships) and 7 (activity-based costing), job-order costing and overhead application rates (chapter 4) and cost-volume-profit analysis (chapter 3) are still included quite significantly on this second exam.

1. Cost-Activity Relationships (Chapter 6)

The first question on the exam is a fill-in question which will involve specifying cost-activity relationships in terms of their cost hierarchy. Thus, you should be able to determine for any type of factory cost whether it is a unit level, batch level, product level or facility level activity. (See E6-1 for a problem which is similar to the one included on the exam.)

It should be noted that the cost estimation methods discussed at the end of this chapter, such as the high-low, scattergraph, least squares, etc., will not be included on this exam.

2. Cost-Activity Relationships (Chapter 6)

The second question on the exam is a short problem in which calculations for specifying the cost-activity relationship is required. The problem on the exam will have some similar characteristics to E6-2 through E6-8, or P6-18 or P6-19.

3. The Determination of the Manufacturing Costs of Products or Jobs Using Plant-wide or Departmental Overhead Rates (Chapter 4)

You should be able to cost out a product or job using a plant-wide or departmental manufacturing overhead rates to apply or assign overhead to products. You should be able to determine overhead application rates using various bases (direct labor hours, machine hours, or units). Once the product cost has been calculated, you should be able to determine the value of unit costs, ending finished goods inventory, the cost of goods sold, gross profits, and income. Related assigned problems include: E4-2, E4-4, E4-10, E4-11 and P4-18.

Be sure you understand the distinctions between using a plant-wide rate and departmental rates. For example, in exercise E4-2, the first question asks for departmental overhead rates, which in each case would be determined by dividing the estimated overhead dollars for each department by the estimated amount of the base for each department. Although this exercise doesn’t ask for it, if it was required to determine the plant-wide rate based on direct labor hours, it would be determined by dividing ($80,000 + $72,000) by (15,000 DLH + 5,000 DLH) for a plant-wide rate of $7.60 per DLH. On the other hand, if the rate was to be based on machine hours, then the rate would be determined by dividing ($80,000 + $72,000) by (2,500 MH + 20,000 MH) for a plant-wide rate of $6.76 per machine hour.
Remember you should use budgeted or estimated data only for determining the required overhead rates in a normal cost system. You always apply the calculated rates times the appropriate actual base data for a particular job. Make sure you know how to charge overhead to individual jobs. **Note:** this type of problem appeared on the first exam also.

4. **Activity-Based Costing Problems (Chapter 7)**

Activity-based costing problems will be heavily covered on this exam. You should be able to (1) calculate activity rates, (2) assign costs to products or jobs, and (3) use these activity rates for determining the costs of various cost objects, such as customers and special customer orders.

All of the assigned exercises and problems should be quite useful in understanding how in activity-based costing systems activity costing rates are determined, and how activity costs are charged to cost objects (products, jobs, services, special orders, etc.). You should especially study the two handout problems provided by your instructor.

**Note:** You will not be responsible for calculating over-applied or under-applied overhead on this exam. However, you should understand the source of this regularly-occurring item, and how the accountant generally deals with over- or under-applied amounts.

5. **Cost-Volume-Profit Problems For Multiple-Product Situations (Chapter 3)**

*(Solutions Defined In Sales Dollars Rather Than Units)*

You must understand the concepts of variable costs, fixed costs, and contribution margin. You should be able to analyze an income statement formatted with a variable and fixed cost breakdown. From such a statement you should be able to determine (1) the contribution margin ratio, (2) the total fixed costs and (3) the average tax rate. You should be able to calculate the breakeven point in sales dollars and a company’s operating leverage. You should also be able to determine the level of sales in sales dollars required to achieve a specified level of profit before or after taxes.

You should also be able to calculate breakeven points and expected profit levels under a variety of sets of assumptions. Thus, you should be able to calculate expected profit levels under a particular set of assumptions, including those related to changes in selling price, variable costs, fixed costs, and the level of sales. In short, you will be asked to perform some “what if analyses”, which are often called sensitivity analyses. You will **not** be responsible for any calculations regarding multiple product situations in which the number of units sold of each product must be explicitly calculated. The closely related assigned problem is P3-18 and P3-20.

**Note:** You will receive data which may be presented in a format that is somewhat different from that presented in the text or the problems covered in class. If you are confronted with this situation, do not panic! Carefully read the table and utilize and extract the information you need to solve the problem.