Lesson 4
Service Businesses; Decision Making

EXAMINATION NUMBER:

06157300

Examination

Complete the following exam by answering the questions, compiling your answers in a word-processing file. When you're ready to submit the file, refer to the instructions at the end of the exam. Indicate the question number before each of your answers. Show your work if an answer requires a mathematical solution, and be sure to complete each part of the question.

1. Joleen Harmon, CPA, has two clients and uses a job order cost system. Client A requires 20 hours of partner time and 100 hours of staff time. Client B will use 12 hours of partner time and 75 hours of staff time. Partners are paid $85 an hour and bill support time at 50% of their hourly rate. Staff are paid $25 an hour and bill support time at $20 per billable hour. What is the total charge to each of these clients if profit is added at 20% over cost? (This problem is worth 10 points.)

2. Kelley and Wright, Attorneys, have the following budgeted items for the month of May:

Fringe benefits	$9,200
Depreciation—equipment	5,000
Utilities	2,000
Professional salaries (from budget)	20,000
Travel	2,400
Revenues (from budget)	68,000
Lease expense	6,700
Secretarial support	5,600
Professional dues and subscriptions	3,800

Prepare a budgeted income statement for the month of May. (This problem is worth 10 points.)

3. Walters and Witt, a law firm, is analyzing the profitability of its cases. During the year, the firm represented the Umberg Company in numerous routine legal issues, for which it charged a monthly retainer fee of $2,500. Budget information for the firm follows:

Professional labor:	
Partners	$500,000
Associates	900,000
Paralegals	600,000
Total	$2,000,000
Overhead:	
Secretarial salaries	$900,000
Depreciation of office equipment	300,000
Fringe benefits	400,000
Lease expense	200,000
Utilities	300,000
Communication expenses	250,000
Office supplies	150,000
Total	$2,500,000

Partner, associate, and paralegal hourly salary rates are $100, $60, and $20, respectively.

Actual time spent for the Umberg cases follows:

	Actual
Partners	23 hours
Associates	42 hours
Paralegals	72 hours

Walters and Witt uses activity-based costing to determine the cost of its cases. With a consultant's help, the firm has developed the following information about cost pools:

Cost Pool	Expenses Included	Cost Allocation Base
Secretarial support	Secretarial salaries	Partner labor hours
Fringe benefits	Fringe benefits	Professional labor dollars
Office support	Depreciation, lease, utilities, communications, and supplies	Professional labor hours

a. Compute the budgeted rate per unit of cost driver for each cost pool.
b. Using activity-based costing, compute the cost of the Umberg work this year.

(This problem is worth 10 points.)

4. Dye and Dye, Attorneys-at-Law, each bill 1,500 hours per year and receive pay of $100,000 each. Four paralegals work for the firm and each receives pay of $40,000 and works 2,000 hours per year. Overhead of $396,000 is anticipated; $300,000 is attorney support, and the rest is paralegal support. Determine overhead under each of the following circumstances:

   a. A simplified cost approach is used based on hours.
   b. A simplified cost approach is used based on payroll dollars.
   c. An activity-based costing approach is used. Attorney support is based on labor costs, and paralegal support is based on hours worked.

   (This problem is worth 15 points.)

5. The Tijama Manufacturing Company has determined the cost of manufacturing a unit of product to be as follows, based on normal production of 50,000 units per year:

Direct materials	$20.00	
Direct labor	15.00	
Variable factory overhead	10.00	$45.00
Fixed factory overhead		12.00
		$57.00

Operating statistics for the month of August and September include

	August	September
Units produced	4,200	4,000
Units sold	3,500	4,200
Selling and administrative expenses	$25,000	$35,000

The selling price is $70 per unit. There were no inventories on August 1, and there is no work in process at September 30.

Prepare comparative income statements for each month under the following methods:

a. Absorption costing method
b. Direct costing method

(This problem is worth 15 points.)

6. Tress Enterprises manufactures shampoo and conditioner. Last year, Tress sold 120,000 bottles of product. Unit sales of conditioner amounted to 60% of the number of units of shampoo. This trend is expected to continue. The selling price for both products is $12.00; however, the variable cost of a unit of shampoo is $6.00, while the variable cost of a unit of conditioner is $8.00. Fixed costs are expected to be $420,000.

   a. Compute the number of each product sold.
   b. Compute the weighted-average contribution margin per unit.
   c. Compute the overall break-even point in units.
   d. Compute the unit sales of shampoo and conditioner at the break-even point.
   e. Compute the dollar sales of shampoo and conditioner at the break-even point.

   (This problem is worth 20 points.)

7. Hoctor Industries wishes to determine the profitability of its products and asks the cost accountant to make a comparative analysis of sales, cost of sales, and distribution costs of each product for the year. The accountant gathers the following information, which will be useful in preparing the analysis:

	Standard	Deluxe
Number of units sold	500,000	350,000
Number of orders received	15,000	4,000
Selling price per unit	$10	$20
Cost per unit	$ 4	$12

   Advertising expenses total $100,000, with 60% being expended to advertise the Deluxe model. The representatives' commissions are 5% and 7% for the standard and deluxe models, respectively. The sales manager's salary of $50,000 is allocated evenly between products. Other miscellaneous selling costs are estimated to be $6 per order received.

   a. Compute the selling cost per unit.
   b. Prepare an analysis for Hoctor Industries that shows in comparative form the income derived from the sale of each unit for the year.

   (This problem is worth 20 points.)

SUBMITTING YOUR PROJECT

Once you've completed the project and your **one file** is ready to be submitted, follow the instructions below. Be sure to check your work, and be sure to upload the correct file.

Submit your graded project online.

Save a final version of your project. Be sure to include your name, student number, and exam number in the header or the footer of your saved document. The graded project number is **061573.**

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   a. Click on the **Browse** box.
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Good luck with the project!