I. Multiple Choice: choose the one best answer. (40%)

1. Taurus Company has set various goals, and management is now taking appropriate action to ensure that the firm achieves these goals. One such action is to reduce outlays for overhead, which have exceeded budgeted amounts. Which of the following functions best describes this process?

2. Which of the following entities would most likely have raw materials, work in process, and finished goods?

3. Summers Corporation recently used $75,000 of direct materials and $9,000 of indirect materials in production activities. The journal entries reflecting these transactions would include:
   A. a debit to Manufacturing Overhead for $9,000.  
   B. a debit to Manufacturing Overhead for $84,000. 
   C. a debit to Raw-Material Inventory for $75,000.  
   D. a debit to Work-in-Process Inventory for $84,000.

4. Which of the following is the correct method to calculate a predetermined overhead rate?
   A. Budgeted overhead cost / actual amount of cost driver.  
   B. Budgeted overhead cost / budgeted amount of cost driver. 
   C. Actual overhead cost / budgeted amount of cost driver.  
   D. Actual overhead cost / actual amount of cost driver.

5. Operation costing:
   A. tends to parallel job-order costing with respect to the treatment of conversion cost.  
   B. tends to parallel process costing with respect to the treatment of conversion cost. 
   C. tends to parallel process costing with respect to the treatment of direct materials.  
   D. would likely be used by a manufacturing plant that produces one model of a single product.

6. Which of the following is the proper sequence of events in an activity-based costing system?
   A. Identification of cost drivers, identification of cost pools, calculation of pool rates, assignment of cost to products.  
   B. Identification of cost pools, identification of cost drivers, calculation of pool rates, assignment of cost to products. 
   C. Assignment of cost to products, identification of cost pools, identification of cost drivers, calculation of pool rates.  
   D. Calculation of pool rates, identification of cost drivers, identification of cost pools, assignment of cost to products.

7. Dreyson Manufacturing sells a number of goods whose selling price is heavily influenced by cost. A recent study of product no. 519 revealed a traditionally-derived total cost of $1,019, a selling price of $1,850 based on that figure, and a newly computed activity-based total cost of $1,215. Which of the following statements is true?
   A. All other things being equal, the company should consider a drop in its sales price.  
   B. The company may have been extremely competitive in the marketplace from a price perspective. 
   C. Product no. 519 could be labeled as being overcosted by the firm’s traditional costing procedures.  
   D. If product no. 519 is undercosted by traditional accounting procedures, then all of the company’s other products must be undercosted as well.
### Question 8
8. Package Express, Inc. operates a small package delivery service in the Jacksonville suburbs. If the company uses a regression equation to forecast total operating costs, the coefficient of the equation's independent variable would correspond to the:
   A. variable operating cost per delivery.
   B. fixed operating costs.
   C. number of deliveries.
   D. total variable operating costs.

### Question 9
9. Miller Company has an operating leverage factor of 5. Thus, an 8% change in _____ should result in a 40% change in ______. The respective amounts that change are:
   A. income, sales revenue
   B. sales revenue, income
   C. variable cost, contribution margin
   D. fixed cost, income

### Question 10
10. Consider the following comments about absorption- and variable-costing income statements:
   I. A variable-costing income statement discloses a firm's contribution margin.
   II. Cost of goods sold on an absorption-costing income statement includes fixed costs.
   III. The amount of variable selling and administrative cost is the same on absorption- and variable-costing income statements.
   Which of the above statements is (are) true?
   A. II only.
   B. I and II.
   C. II and III.
   D. I, II, and III.

### Question 11
11. If a manager builds slack into a budget, how would that manager handle estimates of revenues and expenses?

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Underestimate</td>
<td>Underestimate</td>
</tr>
<tr>
<td>B. Underestimate</td>
<td>Overestimate</td>
</tr>
<tr>
<td>C. Overestimate</td>
<td>Underestimate</td>
</tr>
<tr>
<td>D. Overestimate</td>
<td>Overestimate</td>
</tr>
</tbody>
</table>

### Question 12
12. The term "management by exception" is best defined as:
   A. choosing exceptional managers.
   B. controlling actions of subordinates through acceptance of management techniques.
   C. investigating all unfavorable variances.
   D. devoting management time to investigate significant variances.

### Question 13
13. When using a balanced scorecard, a company's market share is typically classified as an element of the firm's:
   A. financial performance measures.
   B. customer performance measures.
   C. learning and growth performance measures.
   D. internal-operations performance measures.

### Question 14
14. Quality of conformance refers to:
   A. the extent to which a product meets the specifications of its design.
   B. the extent to which a product adds value to a firm's product line.
   C. the extent to which a product is designed for its intended use.
   D. the extent to which a product maximizes non-value-added activities in the production process.
15. Capital turnover shows:
   A. the income generated by each dollar of capital investment.
   B. the sales dollars generated by each dollar of capital investment.
   C. the contribution margin generated by each dollar of capital investment.
   D. the capital investment generated by each sales dollar.

16. When deciding whether to sell a product at the split-off point or process it further, joint costs are not usually relevant because:
   A. such amounts do not help to increase sales revenue.
   B. such amounts only slightly increase a company's sales margin.
   C. such amounts are sunk and do not change with the decision.
   D. the sales revenue does not decrease to the extent that it should, if compared with separable processing.

17. If the volume sold reacts strongly to changes in price, demand:
   A. has no elasticity.  
   B. has negative elasticity.  
   C. is inelastic.  
   D. is elastic.

18. A piece of equipment costs $30,000, and is expected to generate $8,500 of annual cash revenues and $1,500 of annual cash expenses. The disposal value at the end of the estimated 10-year life is $3,000. Ignoring income taxes, the payback period is:
   A. 3.53 years.  
   B. 3.86 years.  
   C. 4.29 years.  
   D. 6.98 years.

19. A graph comparing locked-in costs with incurred costs will have:
   A. locked-in costs rising much faster initially, but dropping to zero after the product is manufactured.
   B. the two cost lines running parallel until the end of the process, when they join.
   C. locked-in costs rising much faster initially than the incurred cost, but joining the incurred cost line at the completion of the value-chain.
   D. no differences unless the product is manufactured inefficiently.

20. describe(s) the flow of goods, services, and information from the purchase of materials to the delivery of products to consumers, regardless of whether those activities occur in the same organization or with other organizations.
   A. Supply chain  
   B. Key success factors  
   C. Continuous improvement  
   D. Customer focus

II. Mercury Corporation allocates joint costs by using the net-realizable-value method. In the company's Michigan plant, products D and E emerge from a joint process that costs $250,000. E is then processed at a cost of $220,000 into products F and G. Data pertaining to D, F, and G follow.

<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost beyond split-off</td>
<td>$50,000</td>
<td>$27,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>Selling price per pound</td>
<td>$40</td>
<td>$38</td>
<td>$50</td>
</tr>
<tr>
<td>Pounds produced</td>
<td>10,000</td>
<td>4,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Required
1. Allocate the $220,000 processing cost between products F and G. (8%)
2. From a profitability perspective, should product E be processed into products F and G? Show your calculations. (5%)
3. Assume that the net realizable value associated with E is zero. How would you allocate the joint cost of $250,000? (5%)
III. Roberto & Sons buys T-shirts in bulk, applies its own trendsetting silk-screen designs, and then sells the T-shirts to a number of retailers. Roberto wants to be known for its trendsetting designs, and it wants every teenager to be seen in a distinctive Roberto T-shirt. Roberto presents the following data for its first two years of operations, 2010 and 2011.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of T-shirts purchased</td>
<td>200,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Number of T-shirts discarded</td>
<td>2,000</td>
<td>3,300</td>
</tr>
<tr>
<td>Number of T-shirts sold (row 1 – row 2)</td>
<td>198,000</td>
<td>246,700</td>
</tr>
<tr>
<td>Average selling price</td>
<td>$25.00</td>
<td>$26.00</td>
</tr>
<tr>
<td>Average cost per T-shirt</td>
<td>$10.00</td>
<td>$8.50</td>
</tr>
<tr>
<td>Administrative capacity (number of customers)</td>
<td>4,000</td>
<td>3,750</td>
</tr>
<tr>
<td>Administrative costs</td>
<td>$1,200,000</td>
<td>$1,162,500</td>
</tr>
<tr>
<td>Administrative cost per customer (row 7 + row 6)</td>
<td>$300</td>
<td>$310</td>
</tr>
</tbody>
</table>

Administrative costs depend on the number of customers that Roberto has created capacity to support, not on the actual number of customers served. Roberto had 3,600 customers in 2010 and 3,500 customers in 2011.

**Required**

1. Is Roberto’s strategy one of product differentiation or cost leadership? Explain briefly. (4%)
2. Calculate Roberto’s operating income in both 2010 and 2011. (6%)
3. Calculate the growth, price-recovery, and productivity components that explain the change in operating income from 2010 to 2011. (12%)  
4. Suppose that the market for silk-screened T-shirts grew by 10% during 2011. All increases in sales greater than 10% are the result of Roberto’s strategic actions. Calculate the change in operating income from 2010 to 2011 due to growth in market size, product differentiation, and cost leadership. How successful has Roberto been in implementing its strategy? Explain. (15%)
5. Calculate the amount and cost of unused administrative capacity at the beginning of 2011, based on the actual number of customers Roberto served in 2011. (5%)