Multiple Choice

1. Which of the following statements is correct?
   a) A cost flow diagram is helpful by providing a graphical representation of the product costing process.
   b) Manufacturing overhead can be directly traced to products.
   c) The cost system should be tailored to the needs of accountants.
   d) The benefits of accurate cost information always outweigh the costs of the information system.

2. Which of the following statements regarding the design of the cost systems is correct?
   a) Cost systems should have a decision focus.
   b) Different cost information is used for different purposes.
   c) Cost information for managerial purposes must meet the cost-benefit test.
   d) All of the above.
3. In June, 30,000 bushels of corn are 70% completed in the ending work-in-process inventory. What are the equivalent units of production?
   a) 18,000 bushels.
   b) 19,500 bushels.
   c) 21,000 bushels.
   d) 24,000 bushels.

   \[30,000 \text{ bushels} \times 70\% = 21,000 \text{ equivalent bushels.}\]

The following information is for questions 4 – 7.

Company B produces two products, P1 and P2, at its two departments: Machining and Assembly. The accountant tries to allocate overhead costs to the two products.

<table>
<thead>
<tr>
<th>Overhead</th>
<th>P1</th>
<th>P2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machining</td>
<td>$300,000</td>
<td>1,200 machine hours</td>
<td>800 machine hours</td>
</tr>
<tr>
<td>Assembly</td>
<td>150,000</td>
<td>600 labor hours</td>
<td>900 labor hours</td>
</tr>
<tr>
<td>Total</td>
<td>$450,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. If the accountant decides to allocate overhead based on machine hours, what is P2’s share of the total overhead costs?
   a) $180,000.
   b) $200,000.
   c) $220,000.
   d) $240,000

   \[$450,000 \div 2,000 \text{ machine hours} = $225 \text{ per machine hour.}\]
   \[$225 \text{ per machine hour} \times 800 \text{ machine hours} = $180,000.\]
The following information is for questions 4 – 7.

Company B produces two products, P1 and P2, at its two departments: Machining and Assembly. The accountant tries to allocate overhead costs to the two products.

<table>
<thead>
<tr>
<th>Overhead</th>
<th>P1</th>
<th>P2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machining</td>
<td>$300,000</td>
<td>1,200 machine hours</td>
<td>800 machine hours</td>
</tr>
<tr>
<td>Assembly</td>
<td>150,000</td>
<td>600 labor hours</td>
<td>900 labor hours</td>
</tr>
<tr>
<td>Total</td>
<td>$450,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. If the accountant decides to allocate overhead based on labor hours, what is P1’s share of the total overhead costs?
   
a) $180,000.
   
b) $200,000.
   
c) $220,000.
   
d) $240,000.

   $450,000 ÷ 1,500 labor hours = $300 per labor hour.
   
   $300 per labor hour × 600 labor hours = $180,000.

The following information is for questions 4 – 7.

Company B produces two products, P1 and P2, at its two departments: Machining and Assembly. The accountant tries to allocate overhead costs to the two products.

<table>
<thead>
<tr>
<th>Overhead</th>
<th>P1</th>
<th>P2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machining</td>
<td>$300,000</td>
<td>1,200 machine hours</td>
<td>800 machine hours</td>
</tr>
<tr>
<td>Assembly</td>
<td>150,000</td>
<td>600 labor hours</td>
<td>900 labor hours</td>
</tr>
<tr>
<td>Total</td>
<td>$450,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. If the accountant chooses machine hours for Machining and labor hours for Assembly as allocation bases, what is the overhead rate at Machining?
   
a) $100 per labor hour.
   
b) $140 per labor hour.
   
c) $120 per machine hour.
   
d) $150 per machine hour.

   $300,000 ÷ 2,000 machine hours = $150 per machine hour.
The following information is for questions 4 – 7.

Company B produces two products, P1 and P2, at its two departments: Machining and Assembly. The accountant tries to allocate overhead costs to the two products.

<table>
<thead>
<tr>
<th>Overhead</th>
<th>P1</th>
<th>P2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$300,000</td>
<td>1,200</td>
<td>800</td>
</tr>
<tr>
<td>Machining</td>
<td>1,200</td>
<td></td>
<td>800</td>
</tr>
<tr>
<td>Assembly</td>
<td>150,000</td>
<td>600</td>
<td>900</td>
</tr>
<tr>
<td></td>
<td>1,350</td>
<td>900</td>
<td>1,900</td>
</tr>
<tr>
<td>Total</td>
<td>$450,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. If the accountant chooses machine hours for Machining and labor hours for Assembly as allocation bases, what is P1’s share of the total overhead costs?
   a) $180,000.
   b) $240,000.
   c) $270,000.
   d) $300,000.

\[
\frac{150,000}{1,500} = \$100 \text{ per labor hour.}
\]

\[
\$150 \times 1,200 + \$100 \times 600 = \$240,000.
\]

8. For a two-stage allocation system,
   a) The first stage is the most difficult to accomplish.
   b) Cost pools ideally consist of homogeneous cost items.
   c) Exactly two overhead rates are required.
   d) The allocation bases bear no relationship with the overhead costs.

9. Which of the following statements is false?
   a) Jobs are indistinguishable from each other.
   b) Companies that produce customized products use job costing methods.
   c) Companies that generally mass-produce a single, homogeneous output in a continuing process adopt the continuous flow processing.
   d) Operation is a standardized method of making a product.
10. Operations costing
   a) Is a hybrid costing system.
   b) Is suitable when different products use the same production process and different materials for input.
   c) Combines features from both job and process costing.
   d) All of the above.

11. Job order system and process system are similar in the sense that
   a) Both use the same inventory costing method.
   b) Both keep track of prime costs, but not overhead items.
   c) Both use the same manufacturing technique.
   d) Both require inputs of direct materials, direct labor, and overhead.

12. The basic inventory equation can be represented by
   a) BB + TI = TO + EB.
   b) BB - TI = TO + EB.
   c) BB + EB = TI + TO.
   d) BB + TO - TI = EB.