ACCOUNTING 203  
Chapter 11 Practice Test

True and False Questions

1. Fixed costs are irrelevant in a decision.

2. Any cost that is avoidable is relevant for decision purposes.

3. Sunk costs are sometimes relevant in decision making.

4. Fixed costs that do not differ between alternatives are sunk costs.

5. The book value of a machine, as shown on the balance sheet, is relevant in a decision concerning the replacement of that machine by another machine.

6. Depreciation expense on existing factory equipment is generally relevant to a decision of whether to accept or reject a special offer for a company’s product.

7. Managers should not authorize working overtime at a workstation that contains a bottleneck.

8. An avoidable cost is a cost that can be eliminated (in whole or in part) as a result of eliminating a sunk cost.

Multiple Choice Questions

9. Opportunity costs are:
   A) not used for decision making.
   B) the same as variable costs.
   C) the same as historical costs.
   D) relevant to decision making.

10. The opportunity cost of making a component part in a factory with no excess capacity is the:
    A) variable manufacturing cost of the component.
    B) fixed manufacturing cost of the component.
    C) total manufacturing cost of the component.
    D) net benefit foregone from the best alternative use of the capacity required.
11. Firestone Wall Company is considering renting Machine Y to replace Machine X. It is expected that Y will waste less direct materials than does X. If Y is rented, X will be sold on the open market. For this decision, which of the following factors is (are) relevant?

I. Cost of direct materials used
II. Resale value of machine X

A) Only I
B) Only II
C) Both I and II
D) Neither I nor II

12. When there is a production constraint, a company should emphasize the products with:
A) the highest unit contribution margins.
B) the highest contribution margin ratios.
C) the highest contribution margin per unit of the constrained resource.
D) the highest contribution margins and contribution margin ratios.

13. The Welsh Company has two divisions – North and South. The divisions have the following revenues and expenses:

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$900,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Variable expenses</td>
<td>450,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Traceable fixed expenses</td>
<td>260,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Allocated common corporate expense</td>
<td>240,000</td>
<td>190,000</td>
</tr>
<tr>
<td>Net operating income (loss)</td>
<td>$(50,000)</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Management at Welsh is pondering the elimination of North Division. If North Division is eliminated, its traceable fixed expenses could be avoided. The total common corporate expenses would be unaffected. Given these data, the elimination of North Division would result in an overall company net operating income of:

A) $100,000.
B) $150,000.
C) $(140,000).
D) $50,000

14. Mason Company plans to discontinue a department that has a contribution margin of $24,000 and $48,000 in fixed costs. Of the fixed costs, $21,000 cannot be eliminated. The effect of this discontinuance on Mason’s net operating income would be a(an):

A) decrease of $3,000.
B) increase of $3,000.
C) decrease of $24,000.
D) increase of $24,000.
15. Beluso Company, a manufacturer of snowmobiles, is operating at 70% of plant capacity. Beluso’s plant manager is considering making the headlights now being purchased from an outside supplier for $11.00 each. The Beluso plant has idle equipment that could be used to manufacture the headlights. The design engineer estimates that each headlight requires $4.00 of direct materials, $3.00 of direct labor, and $6.00 of manufacturing overhead. Forty percent of the manufacturing overhead is a fixed cost that would be unaffected by this decision. A decision by Beluso Company to manufacture the headlights should result in a net gain (loss) for each headlight of:
A) $(2.00).
B) $1.60.
C) $0.40.
D) $2.80.

16. Consider the following production cost data for two products, X and Y:

<table>
<thead>
<tr>
<th></th>
<th>Product X</th>
<th>Product Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution margin per unit</td>
<td>$24</td>
<td>$18</td>
</tr>
<tr>
<td>Machine-hours needed per unit</td>
<td>3 hours</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

The company has 15,000 machine hours available each period, and there is unlimited demand for each product. What is the largest possible total contribution margin that can be realized each period?
A) $120,000.
B) $125,000.
C) $135,000.
D) $150,000.

Use the following to answer questions 17-18.

The Cool Cabinet Shoppe is considering the addition of a new line of kitchen cabinets to its current product lines. Expected cost and revenue data for the new cabinets are as follows:

Annual sales………………… 5,000 units
Selling price per unit ........ $180
Variable costs per unit:
Production ............... $120
Selling ................. $15
Avoidable fixed costs per year:
Production ............... $40,000
Selling ................. $60,000
Allocated common fixed costs per year ... $45,000

If the new cabinets are added, it is expected that the contribution margin of the other product lines at the cabinet shop will drop by $20,000 per year.
17. If the new cabinet product line is added next year, the increase in net operating income resulting from this decision would be:
A) $80,000.
B) $225,000.
C) $125,000.
D) $105,000.

18. What is the lowest selling price per unit that could be charged for the new cabinets and still make it economically desirable to add the new product line?
A) $159.
B) $164.
C) $171.
D) $151.

Use the following to answer questions 19-22.

Lucky Bowl Company makes four products in a single facility. These products have the following unit product costs:

<table>
<thead>
<tr>
<th>Products</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Direct materials</td>
<td>$19.90</td>
<td>$15.20</td>
<td>$20.80</td>
<td>$23.20</td>
</tr>
<tr>
<td>B Direct labor</td>
<td>12.20</td>
<td>8.70</td>
<td>10.50</td>
<td>7.40</td>
</tr>
<tr>
<td>C Variable manufacturing overhead</td>
<td>1.60</td>
<td>2.10</td>
<td>2.00</td>
<td>2.10</td>
</tr>
<tr>
<td>D Fixed manufacturing overhead</td>
<td>10.80</td>
<td>11.90</td>
<td>8.80</td>
<td>10.70</td>
</tr>
<tr>
<td>A Unit product cost</td>
<td>$44.50</td>
<td>$37.90</td>
<td>$42.10</td>
<td>$43.40</td>
</tr>
</tbody>
</table>

Additional data concerning these products are listed below.

<table>
<thead>
<tr>
<th>Products</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Grinding minutes per unit</td>
<td>1.20</td>
<td>0.70</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>B Selling price per unit</td>
<td>$59.30</td>
<td>$51.70</td>
<td>$59.50</td>
<td>$55.60</td>
</tr>
<tr>
<td>C Variable selling price per unit</td>
<td>$3.60</td>
<td>$1.50</td>
<td>$2.20</td>
<td>$3.60</td>
</tr>
<tr>
<td>D Monthly demand in units</td>
<td>4,000</td>
<td>2,000</td>
<td>4,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

The grinding machines are potentially the constraint in the production facility. A total of 9,800 minutes are available per month on these machines.

Direct labor is a variable cost in this company.

19. How many minutes of grinding machine time would be required to satisfy demand for all four products?
A) 10,800
B) 9,800
C) 10,500
D) 12,000
20. Which product makes the LEAST profitable use of the grinding machines?
A) Product A
B) Product B
C) Product C
D) Product D

21. Which product makes the MOST profitable use of the grinding machine?
A) Product A
B) Product B
C) Product C
D) Product D

22. Up to how much should the company be willing to pay for one additional hour of grinding machine time if the company has made the best use of the existing grinding machine capacity? (Round off to the nearest whole cent.)
A) $18.33
B) $12.20
C) 0.00
D) $19.30

Answers: