The following questions were extracted from past exams. They are intended for you to become familiar with the types and the formats of questions that you will be asked on the upcoming exam. Studying ONLY these sample questions will not adequately prepare you for the exam. You should also read the textbook and review the Connect problems and other problems that were presented in class.

Use the following to answer questions 1-3:

Botelho Corporation keeps careful track of the time required to fill orders. Data concerning a particular order appear below:

<table>
<thead>
<tr>
<th>Hours</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait time</td>
<td>18.3</td>
</tr>
<tr>
<td>Process time</td>
<td>1.9</td>
</tr>
<tr>
<td>Inspection time</td>
<td>0.3</td>
</tr>
<tr>
<td>Move time</td>
<td>3.7</td>
</tr>
<tr>
<td>Queue time</td>
<td>8.9</td>
</tr>
</tbody>
</table>

1. The throughput time is:
   A) 5.9 hours  
   B) 33.1 hours  
   C) 1.9 hours  
   D) 14.8 hours

2. The delivery cycle time was:
   A) 12.6 hours  
   B) 30.9 hours  
   C) 3.7 hours  
   D) 33.1 hours

3. The manufacturing cycle efficiency was:
   A) 5.7%  
   B) 14.7%  
   C) 87.2%  
   D) 12.8%
Use the following to answer questions 4-5:

The Bailey Division recorded operating data as follows:

<table>
<thead>
<tr>
<th>Sales</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Operating Assets</td>
<td>$600,0</td>
</tr>
<tr>
<td>Margin</td>
<td>15%</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

4. The net operating income in Year 1 was:
   A) $150,000
   B) $140,000
   C) $90,000
   D) $135,000

5. Sales in Year 1 amounted to:
   A) $1,200,000
   B) $400,000
   C) $900,000
   D) $750,000

Use the following to answer questions 6-7:

Goween Broke Incorporated has a division with the following data for last year:

<table>
<thead>
<tr>
<th>Sales</th>
<th>$15,800,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Operating Income</td>
<td>$812,000</td>
</tr>
<tr>
<td>Average operating Assets</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Minimum required rate of return</td>
<td>8%</td>
</tr>
</tbody>
</table>

6. The division's return on investment (ROI) is closest to:
   A) 14%
   B) 8.33
   C) 18.8%
   D) 11.6%

7. The division's residual income is closest to:
   A) $64,960
   B) $252,000
   C) $812,000
D) $560,000
8. In August, the Universal Solutions Division of Jugan Corporation had average operating assets of $670,000 and net operating income of $77,500. The company uses residual income, with a minimum required rate of return of 12%, to evaluate the performance of its divisions. What was the Universal Solutions Division's residual income in August?
   A) $9,300
   B) $2,900
   C) ($9,300)
   D) ($2,900)

9. Which of the following would not result in a decrease in residual income, assuming other factors remained constant?
   A) A decrease in operating assets.
   B) A decrease in sales.
   C) An increase in the minimum required rate of return.
   D) An increase in expenses.

10. A company’s current net operating income is $16,800 and its average operating assets are $80,000. The company's required rate of return is 18%. A new project being considered would require an investment of $15,000 and would generate annual net operating income of $3,000. What is the residual income of the new project?
    A) $300
    B) ($150)
    C) $5,400
    D) ($2,700)

Use the following to answer questions 11-13:

Sohr Corporation processes sugar beets that it purchases from farmers. Sugar beets are processed in batches. A batch of sugar beets costs $50 to buy from farmers and $15 to crush in the company's plant. Two intermediate products, beet fiber and beet juice, emerge from the crushing process. The beet fiber can be sold as is for $20 or processed further for $19 to make the end product industrial fiber that is sold for $58. The beet juice can be sold as is for $41 or processed further for $23 to make the end product refined sugar that is sold for $58.

11. How much additional profit (loss) does the company make by processing the intermediate product beet juice into refined sugar rather than selling it as is?
    A) ($39)
    B) ($71)
    C) ($21)
    D) ($6)
12. How much profit (loss) does the company make by processing one batch of sugar beets into the end products industrial fiber and refined sugar?
A) $13
B) ($107)
C) ($4)
D) $9

13. Which of the intermediate products should be processed further?
A) beet fiber should be processed into industrial fiber; beet juice should be processed into refined sugar
B) beet fiber should NOT be processed into industrial fiber; beet juice should be processed into refined sugar
C) beet fiber should NOT be processed into industrial fiber; beet juice should NOT be processed into refined sugar
D) beet fiber should be processed into industrial fiber; beet juice should NOT be processed into refined sugar

Use the following to answer questions 14-15:
Cheap Junk Inc has some obsolete Mitt Romney bobble-heads that originally cost $225,000. The bobble-heads can be sold overseas as they are for $150,000, or they can be changed to Obama bobbleheads at an additional cost of $47,000, and then sold for $191,000.

14. Cheap Junk's sunk costs are:
A) $225,000
B) $81,000
C) $75,000
D) $272,000

15. What is the incremental effect on the company's profits if the bobbleheads are reworked and sold rather than sold as is?
A) $34,000 decrease
B) $41,000 increase
C) $6,000 decrease
D) $144,000 increase
Use the following to answer questions 16-17:

Krazy Inc manufactures industrial components. One of its products, Double Krazy, has the following production data:

<table>
<thead>
<tr>
<th>Per Unit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price</td>
<td>$180</td>
</tr>
<tr>
<td>Direct materials</td>
<td>$29</td>
</tr>
<tr>
<td>Direct labor</td>
<td>$5</td>
</tr>
<tr>
<td>Variable manufacturing overhead</td>
<td>$4</td>
</tr>
<tr>
<td>Fixed manufacturing overhead</td>
<td>$21</td>
</tr>
<tr>
<td>Variable selling expense</td>
<td>$2</td>
</tr>
<tr>
<td>Fixed selling and administrative expense</td>
<td>$17</td>
</tr>
</tbody>
</table>

The above per unit data are based on annual production of 4,000 units of Double Krazy.

16. The company has received a special, one-time-only order for 500 units. There would be no variable selling expense on this special order and the total fixed manufacturing overhead and fixed selling and administrative expenses of the company would not be affected by the order. Assuming that Krazy has excess capacity and can fill the order without cutting back on the production of any product, what is the minimum price per unit on the special order below which the company should not go?
   A) $78
   B) $180
   C) $38
   D) $59

17. The company has received a special, one-time-only order for 500 units to be sold at $65. There would be no variable selling expense on this special order and the total fixed manufacturing overhead and fixed selling and administrative expenses of the company would not be affected by the order. However, there are modifications that will have to be done to the product that will increase variable costs by $2.50 and a special machine will have to be purchased for $5,000 that will not have a salvage value or use after this order. If the special order is accepted, the company's overall net operating income will increase (decrease) by:
   A) ($11,500)
   B) ($2,000)
   C) $7,250
   D) $12,250
18. Wishy-Washy Corp is trying to decide if they want to make a component internally or buy it from an outside source. They will use 300,000 of these components in the upcoming year. The unit costs are as follows:

| Direct materials | $22.50 |
| Direct labor     | $12.10 |
| Variable manufacturing overhead | $2.30 |
| Fixed manufacturing overhead       | $4.00  |
| Total Unit Costs              | 40.90  |

Direct labor is a variable cost. Of the fixed manufacturing overhead, 10% is not avoidable if the component were bought from an outside supplier; the remainder is avoidable. In addition, if the components are purchased, the facilities currently used could be leased to another company for $400,000 per year. When deciding whether to make or buy the component, what cost of making the component should be compared to the price of buying the component?

A) $41.83  
B) $40.50  
C) $37.30  
D) $38.63

19. Consider the following production, cost data, and customer demand for two products made by the Halley Company:

<table>
<thead>
<tr>
<th></th>
<th>Product 1</th>
<th>Product 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution margin per unit</td>
<td>$20</td>
<td>$40</td>
</tr>
<tr>
<td>Pounds needed per unit</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Customer demand in units</td>
<td>2,000</td>
<td>600</td>
</tr>
</tbody>
</table>

The company has 5,000 pounds of raw material available each period. What is the largest possible total contribution margin that can be realized each period?

A) $48,000  
B) $44,000  
C) $21,600  
D) $64,000
20. A study has been conducted to determine if Product A should be dropped. Sales of the product total $200,000 per year; variable expenses total $140,000 per year. Fixed expenses charged to the product total $90,000 per year. The company estimates that $40,000 of these fixed expenses will continue even if the product is dropped. These data indicate that if Product A is dropped, the company's overall net operating income would:
   A) decrease by $10,000 per year
   B) decrease by $20,000 per year
   C) increase by $30,000 per year
   D) increase by $20,000 per year

Use the following to answer questions 21-22: The following cost data is for three products:

<table>
<thead>
<tr>
<th>Product</th>
<th>Contribution margin per unit</th>
<th>Machine hours needed per unit</th>
<th>Current Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFG</td>
<td>$12.50</td>
<td>2.50</td>
<td>800 units</td>
</tr>
<tr>
<td>MOR</td>
<td>$9.25</td>
<td>1.75</td>
<td>1,200 units</td>
</tr>
<tr>
<td>RBB</td>
<td>$14.32</td>
<td>3.25</td>
<td>950 units</td>
</tr>
</tbody>
</table>

The machine used to produce all three products is a constrained resource.

21. Consider the constraining environment, in what order should the products be produced to maximize profits?
   A) MOR, BFG, RBB
   B) MOR, RBB, BFG
   C) RBB, BFG, MOR
   D) BFG, MOR, RBB

22. If there is only 4,425 machine hours available, what is the largest contribution margin that can be realized with the current demand? (Choose the closest answer)
   A) $22,532
   B) $30,072
   C) $11,088
   D) $10,776
23. The Whitton Company uses a discount rate of 14%. The company has an opportunity to buy a machine now for $18,000 that will yield cash inflows of $10,000 per year for each of the next three years. The machine would have no salvage value. The net present value of this machine to the nearest whole dollar is:
   A) $24,750
   B) $23,220
   C) $11,250
   D) $5,220

24. A company with $800,000 in operating assets is considering the purchase of a machine that costs $125,000 and which is expected to reduce operating costs by $40,000 each year. The payback period for this machine in years is closest to:
   A) 3.125 years
   B) 20 years
   C) 6.4 years
   D) 0.32 years

25. Sibble Corporation is considering the purchase of a machine that would cost $330,000 and would last for 5 years. At the end of 5 years, the machine would have a salvage value of $50,000. By reducing labor and other operating costs, the machine would provide annual cost savings of $76,000. The company requires a minimum pretax return of 12% on all investment projects. The net present value of the proposed project is closest to:
   A) -$6,020
   B) -$27,670
   C) -$56,020
   D) -$48,764

26. The following data pertain to an investment in equipment:

   | Annual net cash inflows  | $10,000 |
   | Working capital required | $5,000  |
   | Salvage value of the equipment | $1,000 |
   | Life of the project      | 8       |

   At the completion of the project, the working capital will be released for use elsewhere. Compute the net present value of the project, using a discount rate of 10%:
   A) -$1,729
   B) $606
   C) $1,729
   D) $8,271
27. The management of Dewitz Corporation is considering a project that would require an initial investment of $65,000. No other cash outflows would be required. The present value of the cash inflows would be $72,800. The profitability index of the project is closest to:
   A) 1.12
   B) 0.88
   C) 0.107
   D) 0.12

28. We are thinking of investing in a project that would generate $25,000 per year for 6 years. If the project has an initial investment of $115,572, what would the approximate internal rate of return be for this project?
   A) 8%
   B) 10%
   C) 14%
   D) 5%

29. The Yates Company is considering purchasing a piece of equipment which is expected to have a useful life of 7 years with no salvage value at the end of the 7-year period. This equipment is expected to generate a cash inflow of $32,000 each year of its useful life. If the required rate of return is 14%, then what is the most that Yates should pay for the equipment?
   A) $12,800
   B) $150,000
   C) $343,360
   D) $137,216

30. Nuts Corporation is contemplating purchasing equipment that would increase sales revenues by $420,000 per year and cash operating expenses by $231,000 per year. The equipment would cost $747,000 and have a 9 year life with no salvage value. The annual depreciation would be $83,000. The simple rate of return on the investment is closest to:
   A) 14.2%
   B) 11.1%
   C) 56.2%
   D) 25.3%

31. Which of the following costs are always irrelevant in decision making?
   A) Sunk costs.
   B) Fixed costs.
   C) Avoidable costs.
   D) Opportunity costs
32. Bisla designed a new tiny car and wants to price it using the cost-plus method. The company is planning to sell 25,000 cars.

Direct material cost per car ................................................. $18,100
Direct labor cost per car ........................................................ $ 1,200
Variable manufacturing overhead cost per car .................... $ 2,700
Selling and General expenses ............................................. $ 75,150,000
Investment required to develop the car ......................... $ 50,000,000
Required rate of return .................................................... 25%

Which price is the closest to what Bisla wants to sell the car at:
A) $17,655
B) $22,675
C) $25,500
D) $31,300

33. The 98-cent store sells 1,500,000 products per month, each at $0.98, and it desires a $250,000 profit each month. What is the maximum allowable cost to produce 1,500,000 products that the 98-cent store sells?
A) $1,000,000
B) $550,000
C) $789,500
D) $1,220,000

34. The Cheese Company currently sells 250,000 pounds of cheese per week for $6.00 per pound. The management wants to lower the price to $5.00 per pound. The company has a variable cost of $2.00 per pound and weekly fixed costs of $50,500. How many pounds per week will the Cheese Company have to sell at the proposed $5.00 price per pound to maintain the current weekly profit (choose the closest answer)?
A) 300,000
B) 250,000
C) 333,334
D) 312,213