This is a suggested review guide. It is not intended to be all inclusive. You should also study the course material covered. Remember – anything in the book or covered in class is fair game!

Chapter 13

- Be able to calculate the net present value of an investment.
- Calculate an internal rate of return.
- Be able to calculate payback period for an investment.
- Be able to calculate an investment’s project profitability.
- Compute simple rate of return.

1. A typical capital budgeting decision might be all of the below EXCEPT:
   A. Deciding if the company should purchase a new production machine or repair the current one.
   B. Deciding to change the color on a product to increase future sales.
   C. Deciding if the company should lease or purchase the salesman's car.
   D. Deciding to expand the plant by increasing the shipping department.

2. Typical cash outflows include all of the below EXCEPT:
   A. Release of working capital previously tied up in a capital project.
   B. Repairs to fix a production machine.
   C. The purchase of cash registers and additional inventory to put in a new store location.
   D. The purchase of a new forklift.

3. Which of the following is NOT a short-coming of the payback method?
   A. It only considers cash flows received before the payback period.
   B. It only considers cash flows received after the payback period.
   C. Just because a project has a shorter payback period does not mean it is the most desirable project.
   D. It does not take into consideration the time value of money.

4. (Ignore income taxes in this problem.) A company with $600,000 in operating assets is considering the purchase of a machine that costs $72,000 and which is expected to reduce operating costs by $18,000 each year. These reductions in cost occur evenly throughout the year. The payback period for this machine in years is closest to:
   A. 0.25 years
   B. 33.3 years
   C. 8.3 years
   D. 4 years
5. (Ignore income taxes in this problem.) The Zinger Corporation is considering an investment that has the following data:

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment</th>
<th>Cash inflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$8,000</td>
<td>$2,000</td>
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<tr>
<td>2</td>
<td>$3,000</td>
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<td>5</td>
<td>$0</td>
<td>$4,000</td>
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</tbody>
</table>

Cash inflows occur evenly throughout the year. The payback period for this investment is:
A. 3.0  
B. 4.0  
C. 3.5  
D. 4.5

6. Czlapinski Corporation is considering a capital budgeting project that would require an initial investment of $440,000 and working capital of $32,000. The working capital would be released for use elsewhere at the end of the project in 4 years. The investment would generate annual cash inflows of $147,000 for the life of the project. At the end of the project, equipment that had been used in the project could be sold for $11,000. The company's discount rate is 7%. The net present value of the project is closest to:
A. $66,282  
B. $159,000  
C. $58,698  
D. $34,282

7. Beaver Corporation is investigating the purchase of a new threading machine that costs $18,000. The machine would save about $4,000 per year over the present method of threading component parts, and would have a salvage value of about $3,000 in 6 years when the machine would be replaced. The company's required rate of return is 12%. The machine's net present value is closest to:
A. <$35>  
B. $1,556  
C. $11,000  
D. $8,000

8. Kingsolver Corporation has provided the following data concerning an investment project that it is considering:

<table>
<thead>
<tr>
<th>Initial investment</th>
<th>$450,000</th>
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<tbody>
<tr>
<td>Working capital</td>
<td>$16,000</td>
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<tr>
<td>Annual cash flow</td>
<td>$133,000 per year</td>
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<tr>
<td>Salvage value</td>
<td>$6,000</td>
</tr>
<tr>
<td>Expected life</td>
<td>3 years</td>
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<tr>
<td>Discount rate</td>
<td>8%</td>
</tr>
</tbody>
</table>
The working capital would be released for use elsewhere at the end of the project. The net present value of the project is closest to:
A. $105,791
B. $118,495
C. $89,791
D. $51,000

9. The net present value method of capital budgeting is superior to the payback method because it:
A. Reflects the effects of depreciation and income taxes.
B. Is easier to implement.
C. Requires less data.
D. Considers the time value of money.

10. In capital budgeting computations, discounted cash flow methods:
A. Assume that all cash flows occur at the beginning of a period.
B. Ignore all cash flows after the payback period.
C. Can't be used unless cash flows are uniform from year to year.
D. Automatically provide for recovery of initial investment.

11. Galindo Long-Haul, Inc., is considering the purchase of a tractor-trailer that would cost $178,848, would have a useful life of 8 years, and would have no salvage value. The tractor-trailer would be used in the company's hauling business, resulting in additional net cash inflows of $36,000 per year. The internal rate of return on the investment in the tractor-trailer is closest to:
A. 12%
B. 10%
C. 13%
D. 15%

12. Henscheid Roofing is considering the purchase of a crane that would cost $104,972, would have a useful life of 7 years, and would have no salvage value. The use of the crane would result in labor savings of $23,000 per year. The internal rate of return on the investment in the crane is closest to:
A. 15%
B. 10%
C. 13%
D. 12%
13. Jason Corporation has invested in a machine that cost $80,000, that has a useful life of eight years, and that has no salvage value at the end of its useful life. The machine is being depreciated by the straight-line method, based on its useful life. It will have a payback period of five years. Given these data, the simple rate of return on the machine is closest to:
   A. 6.8%
   B. 12%
   C. 7.5%
   D. 9%

14. Villena Corporation is considering a project that would require an investment of $48,000. No other cash outflows would be involved. The present value of the cash inflows would be $52,800. The profitability index of the project is closest to:
   A. 0.10
   B. 0.90
   C. 1.10
   D. 0.09

15. Buse Corporation is investigating buying a small used aircraft for the use of its executives. The aircraft would have a useful life of 8 years. The company uses a discount rate of 14% in its capital budgeting. The net present value of the investment, excluding the salvage value of the aircraft, is -$488,487. Management is having difficulty estimating the salvage value of the aircraft. To the nearest whole dollar how large would the salvage value of the aircraft have to be to make the investment in the aircraft financially attractive?
   A. $68,388
   B. $1,391,701
   C. $488,487
   D. $3,489,193
<table>
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<th>Question</th>
<th>Answer</th>
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