Chapter 13

1. Which of the following capital budgeting methods might not consider the salvage value of a machine being considered for purchase?
   a. Internal rate of return.
   b. Net present value.
   c. Payback.
   d. Discounted payback.
   e. Answers c and d are both correct.

2. When a project's NPV exceeds zero,
   a. The project will also be acceptable using payback criteria.
   b. The IRR should be calculated to insure that the project's projected rate of return exceeds the required rate of return.
   c. The project should be accepted without any further consideration, assuming we are confident that the cash flows and the required rate of return have been properly estimated.
   d. Only answers a and c are correct.
   e. None of the above is correct.

3. A major *disadvantage* of the payback period method is that it
   a. Is useless as a risk indicator.
   b. Ignores cash flows beyond the payback period.
   c. Does not directly account for the time value of money.
   d. All of the above are correct.
   e. Only answers b and c are correct.

3. The underlying cause of ranking conflicts between the NPV and IRR methods is differing
   a. Initial cost.
   b. Reinvestment rate assumption.
   c. Cash flow timing.
   d. Profitability indices.
   e. All of the above comprise the underlying cause of ranking conflicts.

4. A firm is considering the purchase of an asset whose risk is greater than the current risk of the firm, based on any method for assessing risk. In evaluating this asset, the decision maker should
   a. Increase the IRR of the asset to reflect the greater risk.
   b. Increase the NPV of the asset to reflect the greater risk.
   c. Reject the asset, since its acceptance would increase the risk of the firm.
   d. Ignore the risk differential if the asset to be accepted would comprise only a small fraction of the total assets of the firm.
   e. Increase the required rate of return used to evaluate the project to reflect the higher risk of the project.

6. Risk in a revenue producing project can best be adjusted for by

a. Ignoring it.
b. Adjusting the discount rate upward for increasing risk.
c. Adjusting the discount rate downward for increasing risk.
d. Picking a risk factor equal to the average discount rate.
e. Reducing the NPV by 10 percent for risky projects.

7. The internal rate of return of a capital investment
a. Changes when the required rate of return changes.
b. Is equal to the annual net cash flows divided by one half of the project's cost when the cash flows are an annuity.
c. Must exceed the required rate of return in order for the firm to accept the investment.
d. Is similar to the yield to maturity on a bond.
e. Answers c and d are both correct.

8. Suppose the firm's required rate of return is stated in nominal terms, but the project's expected cash flows are expressed in real dollars. In this situation, other things held constant, the calculated NPV would
a. Be correct.
b. Be biased downward.
c. Be biased upward.
d. Possibly have a bias, but it could be upward or downward.
e. More information is needed; otherwise, we can make no reasonable statement.

9. If a typical U.S. company uses the same discount rate to evaluate all projects, the firm will most likely become
a. Riskier over time, and its value will decline.
b. Riskier over time, and its value will rise.
c. Less risky over time, and its value will rise.
d. Less risky over time, and its value will decline.
e. There is no reason to expect its risk position or value to change over time as a result of its use of a single discount rate.

10. As the director of capital budgeting for Denver Corporation, you are evaluating two mutually exclusive projects with the following net cash flows:

Year	Project X	Project Z
0	–$100,000	–$100,000
1	50,000	10,000
2	40,000	30,000
3	30,000	40,000
4	10,000	60,000

If Denver's required rate of return is 15 percent, you would choose?
a. Neither project.
b. Project X, since it has the higher IRR.

c. Project Z, since it has the higher NPV.
d. Project X, since it has the higher NPV.
e. Project Z, since it has the higher IRR.

11. An insurance firm agrees to pay you $3,310 at the end of 20 years if you pay premiums of $100 per year at the end of each year of the 20 years. Find the internal rate of return to the nearest whole percentage point.

a. 9%
b. 7%
c. 5%
d. 3%
e. 11%

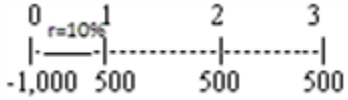
Real Time Inc.
The president of Real Time Inc. has asked you to evaluate the proposed acquisition of a new computer. The computer's price is $40,000, and it falls into the MACRS 3-year class. Purchase of the computer would require an increase in net working capital of $2,000. The computer would increase the firm's before-tax revenues by $20,000 per year but would also increase operating costs by $5,000 per year. The computer is expected to be used for 3 years and then be sold for $25,000. The firm's marginal tax rate is 40 percent, and the project's required rate of return is 14 percent.
[MACRS table required]

12. Refer to Real Time Inc. What is the project's NPV?

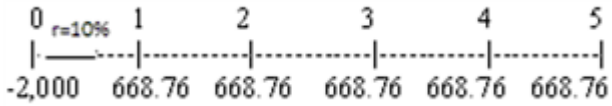
a. $2,622
b. $2,803
c. $2,917
d. $5,712
e. $6,438

13. Your company is choosing between the following non-repeatable, equally risky, mutually exclusive projects with the cash flows shown below. Your required rate of return is 10 percent. How much value will your firm sacrifice if it selects the project with the higher IRR?

Project S:



Project L:



a. $243.43
b. $291.70
c. $332.50
d. $481.15

e. $535.13

14. Given the following net cash flows, determine the IRR of the project:

Time	Net cash flow
0	$1,520
1	−1,000
2	−1,500
3	500

a. 36%
b. 32%
c. 28%
d. 24%
e. 20%

15. ____ are decisions about whether to purchase capital assets to take the place of existing assets so as to maintain existing operations.
a. Replacement decisions
b. Expansion decisions
c. Independent decisions
d. Mutually exclusive decisions

16. ____ projects are a set of projects where the acceptance of one project means that other projects cannot be accepted.
a. Mutually exclusive
b. Independent
c. Replacement
d. Expansion

17. Which of the following decision measures should capital budgeting decision makers consider?
a. discounted payback
b. NPV
c. IRR
d. MIRR
e. Although NPV is considered the most important method in the decision process, the other measures can provide different relevant information that is useful to the process and thus should be used when appropriate

18. Which of the following capital budgeting techniques does not adjust for the riskiness of the cash flows?
a. IRR
b. NPV
c. MIRR
d. Payback

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