

## Final Exam—Part 1 Sample Questions

**INSTRUCTIONS:** Read each question carefully. After you choose an answer, you can check to see if it is correct by clicking “CHECK ANSWER” below the question. To get the most out of this sample exam, you should try to answer each question before looking at the answer. Grade yourself to see how well you score on this exam and to determine in what areas you might need to study more.

Sample questions for Part 2 of the Final Exam are contained in the sample questions for Chapters 1 – 4 and Chapters 5 – 8.

1. Richard evaluated a capital budgeting project—a new machine that is needed to manufacture inventory—using his firm’s required rate of return and found that the project’s net present value (NPV) is *negative*. Based on this information, which of the following *must* be correct?
  - a. The project’s internal rate of return is also negative.
  - b. The project’s discounted payback period is greater than its economic life.
  - c. As long as its initial investment outlay is fairly low, the firm should purchase the new machine if it is used to replace an older machine that is required to produce inventory.
  - d. The project’s traditional payback period must be greater than the maximum payback period that the firm has established.
  - e. None of the above is correct.

[CHECK ANSWER](#)

2. Express Press evaluates many different capital budgeting projects each year. The risks of the projects often differ significantly, from very little risk to risks that are substantially greater than the average risk associated with the firm. If Express Press always uses its weighted average cost of capital, or average required rate of return, to evaluate all of its capital budgeting projects, then the company might make an *incorrect decision, or a mistake*, by
  - a. accepting projects that actually should be rejected.
  - b. accepting projects with internal rates of return that are too high.
  - c. rejecting projects that actually should be rejected.
  - d. rejecting projects with internal rates of return that are lower than the appropriate risk-adjusted required rate of return.
  - e. accepting projects that actually should be accepted.

[CHECK ANSWER](#)

3. The cash conversion cycle refers to the average amount of time
  - a. from the payment for the purchase of raw materials to manufacture a product until the collection of accounts receivable associated with the sale of the product.
  - b. between the cash payment for the purchase of raw materials and labor and their utilization in the manufacturing process.
  - c. a product remains in inventory in various stages of completion.
  - d. it takes to collect cash following a sale.
  - e. taken to convert all short-term assets to cash.

[CHECK ANSWER](#)

4. Sam's Orthodontic Services (SOS) will retain for reinvestment \$300,000 of the net income it expects to generate next year. Recently, the CFO determined that the firm's after-tax cost of debt,  $r_{dT}$ , is 5 percent, its cost of internal equity (retained earnings),  $r_s$ , is 10 percent, and its cost of external equity (new common stock),  $r_e$ , is 13 percent. Next year, SOS expects to finance capital budgeting projects so as to maintain its current capital structure, which consists of 60 percent debt. SOS has no preferred stock. What will SOS's marginal cost of capital be if its total capital budgeting needs are \$700,000 for next year?
- 7.0%
  - 7.5%
  - 8.2%
  - 9.0%
  - The cost of capital for SOS cannot be determined without knowing the tax rate.

[CHECK ANSWER](#)

5. The inventory conversion period (ICP) refers to the average length of time required to
- convert raw materials into finished goods.
  - sell all the finished goods.
  - convert materials into finished goods and then sell those goods.
  - collect cash following the sale of inventory.
  - provide payment in cash for the purchase of raw materials and labor.

[CHECK ANSWER](#)

6. Depreciation must be considered when evaluating the incremental operating cash flows associated with a capital budgeting project because
- it represents a tax-deductible *cash* expense.
  - the firm has a cash outflow equal to the depreciation expense each year.
  - although it is a non-cash expense, depreciation has an impact on the taxes paid by the firm, which is a cash flow.
  - depreciation is a sunk cost.
  - None of the above is correct.

[CHECK ANSWER](#)

7. The following information relates to Gooday Corporation:

Inventory conversion period	49.6 days
Payables deferral period	26.6 days
Average accounts receivable	\$150,000
Annual sales (all credit)	\$1,800,000

What is Gooday's cash conversion cycle (CCC)?

- a. 55.8 days
- b. 115.8 days
- c. 53.0 days
- d. 7.0 days
- e. 38.6 days

[CHECK ANSWER](#)

8. Hill Top Lumber Company is considering building a sawmill in the state of Washington because the company doesn't have such a facility to service its growing customer base that is located on the west coast. Hill Top's executives believe that future growth in west coast customers will make the sawmill project a good investment. When evaluating the acceptability of the project, which of the following would *not* be considered a relevant cash flow that should be included when determining its initial investment outlay?
- a. Hill Top owns acreage that is large enough and would be an ideal location for the sawmill. The land, which was purchased five years ago, has a current value of \$3 million.
  - b. It is estimated that the cost of building the sawmill will be \$175 million.
  - c. It will cost \$3 million to clear the land on which Hill Top wants to build the sawmill.
  - d. It is estimated that \$20 million of business from existing customers will move to the new sawmill.
  - e. All of these cash flows should be included in the computation of the sawmill's initial investment outlay.

[CHECK ANSWER](#)

9. Tara is evaluating two *mutually exclusive* capital budgeting projects that have the following characteristics:

<u>Year</u>	<u>Cash Flows</u>	
	<u>Project Q</u>	<u>Project R</u>
0	\$(4,000)	\$(4,000)
1	0	3,500
2	5,000	1,100
IRR	11.8%	12.0%

- If the firm's required rate of return (r) is 10 percent, which project should be purchased?
- a. Both projects should be purchased, because the IRRs for both projects exceed the firm's required rate of return.
  - b. Neither project should be purchased, because the IRRs for both projects exceed the firm's required rate of return.
  - c. Project Q, because its net present value (NPV) is higher than Project R's NPV.
  - d. Project R, because its NPV is higher than Project Q's NPV.
  - e. None of the above is a correct answer.

[CHECK ANSWER](#)

10. In essence, who sets (determines) the cost of capital for a firm?
- top executives, such as the chief executive officer (CEO) and the chief financial officer (CFO)
  - Congress
  - investment bankers
  - insurance companies
  - investors

[CHECK ANSWER](#)

11. Analysts of the ICM Corporation have indicated that the company is expected to grow at a 5 percent rate for as long as it is in business. Currently the ICM's stock is selling for \$70 per share. The most recent dividend paid by the company was \$5.60 per share. If ICM issues new common stock it will incur flotation costs equal to 7 percent. If ICM's marginal tax rate is 35 percent, what is its cost of retained earnings—that is, its internal equity?
- 13.4%
  - 8.7%
  - 8.4%
  - 9.0%
  - 14.0%

[CHECK ANSWER](#)

12. A firm is evaluating a new machine to replace an existing, older machine. The old (existing) machine is being depreciated at \$20,000 per year, whereas the new machine's depreciation will be \$18,000. The firm's marginal tax rate is 30 percent. Everything else equal, if the new machine is purchased, what effect will the change in depreciation have on the firm's incremental operating cash flows?
- There should be no effect on the firm's cash flows, because depreciation is a noncash expense.
  - Operating cash flows will increase by \$2,000.
  - Operating cash flows will increase by \$1,400.
  - Operating cash flows will decrease by \$600.
  - None of the above is correct.

[CHECK ANSWER](#)

13. The current asset financing policy that calls for matching the maturities of assets and liabilities is known as the:
- self-liquidating approach.
  - conservative approach.
  - aggressive approach.
  - current approach.

- e. spontaneous approach.

CHECK ANSWER

14. When evaluating the cash flows associated with a capital budgeting project, shipping and installation costs associated with the purchase of an asset, such as a lathe, are considered part of the
- a. initial investment outlay; these expenses effectively are part of the asset's purchase price.
  - b. incremental operating cash flows because shipping and installation costs represent expenses that have to be written off over the life of the asset.
  - c. terminal cash flows, because these expenses aren't paid until the end of the asset's life.
  - d. sunk costs because these expenses do not affect any current or future cash flows associated with investing in the asset.
  - e. None of the above is a correct answer.

CHECK ANSWER

15. The director of capital budgeting gave three college interns different independent projects to evaluate using the net present value (NPV), internal rate of return (IRR), and discounted payback techniques. The results of the interns' analyses are as follows:

Intern's Name	Project's Cost	Project's Life	NPV	IRR	Discounted Payback	Decision
Steve	\$100,000	5 years	\$1,250	14.0%	4.2 years	Accept
Amy	90,000	7	845	15.2	5.9	Accept
Kim	102,000	4	(2,343)	11.5	3.5	Reject

The director of capital budgeting has reviewed the analyses, and he agrees with the final decision each intern made, which is given in the far right column of the table; but he spotted an error made by one of the interns. Which intern's analysis has an error—that is, has an incorrect result for a computation? (THINK a little before answering this question!)

- a. Steve
- b. Amy
- c. Kim
- d. Without knowing the firm's required rate of return, the intern who has recorded an incorrect result cannot be identified.
- e. None of the above is a correct answer, because there is no error. All of the results are consistent with what would be expected given that the final decision is correct.

CHECK ANSWER

16. Consider the discussions concerning the cost of common equity. What is the relationship between the cost of retained earnings (internal equity),  $r_s$ , and the cost of new common equity (external equity),  $r_e$ ?
- a.  $r_s > r_e$ ; because new stockholders are willing to accept a lower return, and thus "pay their dues," before they start receiving the higher returns that existing, loyal stockholders

- receive.
- b.  $0 = r_s < r_e$ ; because there is no “real” cost to the income that the firm decides to retain to reinvest in assets rather than to payout to common stockholders as dividends, but there is a real cost to issuing new common stock.
  - c.  $0 < r_s < r_e$ , because there is a real cost to retaining income (earnings) for reinvestment, but the firm has to pay flotation costs when issuing new common stock, which makes new common equity more costly than retained earnings.
  - d.  $r_s = r_e$ , because they both represent essentially the same source of funds, so they must have the same cost.
  - e. None of the above is a correct answer.

[CHECK ANSWER](#)

17. After evaluating two *mutually exclusive* capital budgeting projects, the capital budgeting manager has determined that both are acceptable. Based on this information, which of the following statements is *incorrect*?
- a. Both projects have net present values that are greater than zero.
  - b. The projects’ internal rates of return must be greater than the firm’s required rate of return.
  - c. Each project’s discounted payback is less than its estimated life.
  - d. Both projects should be purchased.
  - e. If the firm purchases either project, the value of the firm will increase.

[CHECK ANSWER](#)

18. Which of the following types of short-term credits increase automatically as a firm's operations expand?
- a. Long-term bonds
  - b. Lines of credit
  - c. Commercial paper
  - d. Bank loans
  - e. Accruals

[CHECK ANSWER](#)

19. Stork Baby Clothes took out a 45-day \$100,000 discount interest loan with a 7.2 percent quoted (simple) interest rate. What is the effective annual rate,  $r_{EAR}$ , for this loan?
- a. 7.50%
  - b. 7.20%
  - c. 7.27%
  - d. 0.91%
  - e. \$900

[CHECK ANSWER](#)

20. Options Infinity Limited (OIL) is considering the following independent, non-divisible capital budgeting projects:

<u>Project</u>	<u>Initial investment outlay (cost)</u>	<u>Internal rate of return, IRR</u>
R	\$250,000	18.5%
W	200,000	15.0
Z	180,000	14.0

OIL can raise new funds to invest in capital budgeting projects based on the following schedule:

<u>Amount raised</u>	<u>Cost, r = WACC</u>
\$ 1 - \$150,000	12.0%
\$150,001 - \$400,000	14.5
\$400,001 and above	16.0

According to this information, which project(s) should OIL accept?

- Project R only
- Projects R and W
- Projects R, W, and Z
- Projects W and Z
- None of the above is correct.

[CHECK ANSWER](#)

21. Which of the following should *not* be considered when determining the marginal cash flows associated with a capital budgeting project?

- opportunity costs
- externalities, or effect on other parts of the firm
- inflation
- shipping and installation costs
- sunk costs related to the project

[CHECK ANSWER](#)