## Session 13a: Post Class tests

- 1. The earnings reported by a company can be very different from its cash flows. There are companies that report very large positive earnings while also generating large negative cash flows. Which of the following is most likely to create this phenomenon?
  - a. High capital expenditures, high depreciation, decreasing working capital
  - b. Low capital expenditures, high depreciation, decreasing working capital
  - c. High capital expenditures, low depreciation, increasing working capital
  - d. Low capital expenditures, low depreciation, decreasing working capital
  - e. Low capital expenditures, high depreciation, increasing working capital
- 2. Oneida Enterprises reported pre-tax operating income of \$100 million last year and paid an effective tax rate of 40% on its taxable income; its net income was 50 million. The company also reported a book value of equity of \$300 million at the start of the year, while its market capitalization was \$400 million. The debt outstanding (in both book and market terms) at the start of the year was \$150 million and the cash balance was \$50 million. What after-tax return on invested capital did the company earn last year?
  - a. 12%
  - b. 13.33%
  - c. 15%
  - d. 16.67%
  - e. 20%
  - f. 25%
- 3. You are the CFO of a steel company, considering investing in a new steel plant. The plant is expected to cost \$100 million to build and have a 20-year life, at the end of which it is expected to have a salvage value of \$20 million. The average annual after-tax operating income is expected to be \$9 million and the average annual net income is expected to be \$5 million. Your decision rule is to accept any investment that generates an average return on capital that exceeds the cost of capital over its life. Assuming straight-line depreciation, what is the return on capital on this project?
  - a. 5%
  - b. 8.33%
  - c. 9%
  - d. 15%
  - e. 45%
- 4. You have been presented with estimated after-tax operating income and working capital requirements on a project that has a five-year life.

	1	2	3	4	5
After-tax Operating Income	\$100	\$120	\$135	\$145	\$150
Working Capital (Total)	\$20	\$24	\$27	\$29	\$30

The project requires an initial investment of \$150 million in new capacity that will depreciated straight line to a salvage value of \$30 million at the end of year

five. Assuming that you will be able to recoup your entire working capital at the end of year 5, estimate the after-tax cash flows each year for the next 5 years.

	Now	1	2	3	4	5
Initial Investment						
After-tax Operating Income		\$100	\$120	\$135	\$145	\$150
+ Depreciation						
- Change in working capital						
+ Salvage value						
After-tax cash flow						

- 5. You are reviewing the cash flows estimated by an analyst for a ten-year project. The after-tax cash flow each year is expected to be \$25 million, but those cash flows are after an allocation of \$10 million in G&A expenses to this project each year. If only 25% of these G&A expenses are variable (and related to this project) and the tax rate is 40%, what is the correct incremental cash flow each year on this project?
  - a. \$26.0 million
  - b. \$26.5 million
  - c. \$27.5 million
  - d. \$28.0 million
  - e. \$29.5 million
  - f. \$32.5 million