*A true Friend is the best Possession.*

Ben Franklin

For the multiple choice questions, give the correct choice and very briefly explain your answer.

1. When evaluating a project, the chance of default is captured by:
   (a) using the CAPM expected rate of return as the discount rate.
   (b) using the expected return on the market as the discount rate.
   (c) calculating the expected cash flows of the project.
   (d) discounting the expected cash flows of the project at the equity premium
2. If your tax rate is 40%, what interest rate do you earn in after-tax terms if the before-tax interest rate is 6%?
3. On Oct 20, 2024, tax-exempt A-rated 10-year muni bonds yielded 3.15%, and corporate 10-year A-rated bonds yielded 4.77%. What is the marginal tax rate of the marginal taxable investor? If your marginal tax rate is 37%, which is the better buy?
4. You purchased a house for $450,000 and incurred additional costs of $4,000 at the time of the purchase. Because of a job transfer, you were forced to sell the house later for $400,000. The selling broker charged a 6% commission, and you estimated that other costs associated with the sale, both direct and indirect, amounted to $10,000. What was your rate of return on this investment?
   (a) 24.0%
   (b) 17.9%
   (c) -19.4%
   (d) -21.3%
5. If the stock market is at least semi-strong efficient then,
   (a) you should be able to determine when to buy or to sell a stock by studying the pattern of its historical prices.
   (b) trading on information that you read in The Wall Street Journal or on the internet is unlikely to allow you to purchase stocks that are significantly underpriced.
   (c) you cannot expect to find underpriced or overpriced stocks even if you have inside information.

(d) you are likely to find underpriced and overpriced securities by conducting a thorough analysis of a firm's financial statements.

6. If markets are efficient (and maybe even perfect), it doesn't matter what portfolio you hold because the prices are fair. Comment very briefly (2 or 3 sentences are sufficient).

7. The most important financial statement from the viewpoint of a financial analyst is the:

   (a) balance sheet

   (b) income statement

   (c) cash flow statement

   (d) owners' equity statement

8. Pet Sounds had sales of $12 million in 2024. Its cost of goods sold was $9 million, and it had selling, general, and administrative expenses of $1.1 million. The firm paid $100,000 in interest to its bond holders and $50,000 in dividends to its shareholders. For simplicity, assume a flat tax rate of 21%. Pet Sound's net income for 2024 was:

   (a) $3.00 million

   (b) $1.90 million

   (c) $1.80 million

   (d) $1.75 million

   (e) $1.42 million

9. FLS Inc. is preparing its 2024 statement of cash flows. For each item below, indicate whether it will be (1) a decrease or increase to (2) operating, investing, or financing CFs.

   (a) Buy warehouse and land

   (b) Receiving payment of an account receivable

   (c) Issuing more shares of stock

   (d) Depreciation expense of the new warehouse

   (e) Payment of dividends by FLS

   (f) Payment of interest by FLS on a bond

   (g) Sale of goods on credit to a customer (increase in AR)

(h) Sale of bonds (borrowing)

(i) Redemption of some of its shares outstanding

(j) Payment of an account payable for services received from a law firm

(k) Increase in a payable for services rendered by another law firm

10. Open Costco's (COST) 2024 financial statements on the class web page. For the questions below, please indicate, where relevant: (1) the formula you used, (2) the numbers used in the computation, and (3) the source of the numbers from the financials, *e.g.*, income statement, CF statement. Note, for some of the questions, this won't be relevant, *e.g.*, COST's P/E ratio. The notes to the financials may be useful.

    (a) What is COST's current ratio?

    (b) What is COST's interest coverage ratio?

    (c) What is the book value of a share of COST? What is the current market value?

    (d) What items may be missing from COST's BS that may account for the difference between the book and market values?

    (e) What is COST's P/E ratio?

    (f) How much dividends did COST pay in FY 2024?

    (g) What was the total value of shares COST repurchased in FY 2024? What was the average price per share? Good use of shareholder money?

    (h) What's COST's gross profit margin (GPM)?

    (i) What's COST's EBITDA and EBITDA margin?

    (j) What's COST's operating profit margin?

    (k) What's COST's net profit margin?

    (l) What is COST's cash flow from operations (CFO)?

    (m) What's COST's unlevered free cash flow (FCF)?

    (n) What are COST's days receivable outstanding (DRO) and days payable outstanding (DPO)? Any comments?

    (o) What is COST's return on equity (ROE)?

    (p) What is COST's return on invested capital (ROIC)?

11. A firm has earnings of \$200 and a P/E ratio of 20. What is a possible estimate of its implied growth rate if its cost of capital is about 10%?