

Part A:

There are 25 questions in Part A, each of 2.4 points. Each of the questions has only ONE correct answer.

1. Which of the following statements is true for a stock that sells now for \$60, pays an annual dividend of \$4.00, and experienced a 20% return on investment over the past year? Its price one year ago was:
 - A. \$42.00
 - B. \$46.15
 - C. \$48.46
 - D. \$53.33

2. An estimation of the opportunity cost of capital for projects that have an "average" level of risk is the rate of return on:
 - A. Treasury bills.
 - B. the market portfolio.
 - C. the market portfolio minus the rate of return on Treasury bills.
 - D. Treasury bonds plus a maturity premium.

3. The standard deviations of individual stocks are generally higher than the standard deviation of the market portfolio because individual stocks:
 - A. offer higher returns.
 - B. have more systematic risk.
 - C. have no diversification of risk.
 - D. do not have unique risk.

4. An investor was expecting a 18% return on his portfolio with beta of 1.25 before the market risk premium increased from 8% to 10%. Based on this change, what return will now be expected on the portfolio?
 - A. 20.0%
 - B. 20.5%
 - C. 22.5%
 - D. 26.0%

5. A stock's risk premium is equal to the:
 - A. expected market return times beta.
 - B. Treasury bill yield plus expected market return.
 - C. risk-free rate plus expected market risk premium.
 - D. expected market risk premium times beta.

6. What would you recommend to an investor who is considering an investment which, according to its beta, plots *below* the security market line (SML)?
 - A. Invest; return is high relative to risk.
 - B. Don't invest; risk is high relative to return.
 - C. Invest; stocks revert to the SML over time.
 - D. Don't invest; stocks below the SML have too much unique risk.

7. What is the WACC for a firm using 55% equity with a required return of 15%, 35% debt with a required return of 8%, 10% preferred stock with a required return of 10%, and a tax rate of 35%?
 - A. 10.72%
 - B. 11.07%
 - C. 11.70%
 - D. 12.05%

8. What is the book value per share of equity for a firm with \$1 million in net common equity, \$50,000 in authorized share capital, 25,000 shares issued, and 20,000 shares outstanding?
 - A. \$38.00
 - B. \$40.00
 - C. \$47.50
 - D. \$50.00

9. Bonds that have been sold only to a limited number of institutional investors are considered:
 - A. secured bonds.
 - B. convertible bonds.
 - C. private placements.
 - D. indexed bonds.

10. Which of the following is true regarding convertible securities:
 - A. A convertible bondholder is forced to convert at a specific time.
 - B. The convertible option on a bond gives the owner the right to buy shares from a company at a set price.
 - C. The owner of a warrant option will benefit if the firm's stock does poorly.
 - D. The owner of a warrant option will benefit if the firm's stock does well.

11. When securities are issued under a rights issue:
 - A. existing shareholders have the opportunity to expand their holdings.
 - B. shares are offered to the public at a discount.
 - C. the existing shares will increase in price.
 - D. current shareholders have the right to resell their stock to the issuer.

12. If the announcement of a new equity offering causes current equity values to drop, then signaling theory would predict that:
- A. supply of equity will outstrip demand.
 - B. management knows the issue to be overpriced.
 - C. the firm has no attractive investment opportunities.
 - D. underwriters charge too high a spread.
13. The "winner's curse" is a reminder that:
- A. successful bidders may often overpay for an object.
 - B. underwriters charge excessive fees.
 - C. stocks are much riskier than bonds.
 - D. underpricing an issue is a cost to existing owners.
14. An increase in a firm's financial leverage will:
- A. increase the variability in earnings per share.
 - B. reduce the operating risk of the firm.
 - C. increase the value of the firm in a non-MM world.
 - D. increase the WACC.
15. Financial risk refers to the:
- A. risk of owning equity securities.
 - B. risk faced by equityholders when debt is used.
 - C. general business risk of the firm.
 - D. possibility that interest rates will increase.
16. An implicit cost of adding debt to the capital structure is that it:
- A. adds interest expense to the operating statement.
 - B. increases the required return on equity.
 - C. reduces the expected return on assets.
 - D. decreases the firm's beta.
17. The "trade-off theory" of capital structure suggests that:
- A. firms add leverage whenever interest rates are low.
 - B. firms with higher risk should use less debt.
 - C. firms should use 50% debt and 50% equity.
 - D. firms should use debt to overcome high par values of stock.
18. According to pecking order theory, managers will often choose to finance with:
- A. new equity rather than debt, due to bankruptcy costs.
 - B. debt rather than new equity, to avoid reduced share price.
 - C. debt rather than retained earnings, to lower the WACC.
 - D. new equity rather than debt, to strengthen EPS.

19. As a firm's debt/equity ratio approaches zero, the firm's expected return on equity approaches:
- A. the expected return on debt.
 - B. the expected return on assets.
 - C. its maximum.
 - D. zero.
20. What would you expect to happen to the price of a share of stock on the day it goes ex-dividend? The price should:
- A. increase by the amount of the dividend.
 - B. decrease by the amount of the dividend.
 - C. decrease by one-half the amount of the dividend.
 - D. remain constant.
21. An increase in dividends might not increase price and may actually decrease stock price if:
- A. the dividend increase cannot be sustained.
 - B. the firm does not maintain an exact dividend payout ratio.
 - C. the firm has too much retained earnings.
 - D. markets are weak-form efficient.
22. A dividend clientele effect assumes that:
- A. investors prefer higher rather than lower dividends.
 - B. shareholders are indifferent regarding dividends.
 - C. investors have specific dividend preferences.
 - D. investors are making "homemade" dividends.
23. Dividend changes are typically viewed by investors as signals of future changes in:
- A. investment.
 - B. the firm's WACC.
 - C. earnings.
 - D. the clientele effect.
24. A stock's beta measures the:
- A. average return on the stock.
 - B. variability in the stock's returns compared to that of the market portfolio.
 - C. difference between the return on the stock and return on the market portfolio.
 - D. market risk premium on the stock.
25. Studies have shown that, on average, new security issues are:
- A. subject to flotation costs of approximately 32%.
 - B. overpriced by the amount of the spread.
 - C. underpriced.
 - D. overpriced to reward venture capitalists.

Part B:

There are 10 questions in Part B, each of 4 points.

Question 1

What is an agency problem? Give two examples of decisions by managers that lead to agency costs.

Question 2

Construct a balance sheet for Sophie's Sofas given the following data. What is shareholders' equity?

- Cash balances = \$10,000
- Inventory of sofas = \$200,000
- Store and property = \$100,000
- Accounts receivable = \$22,000
- Accounts payable = \$17,000
- Long-term debt = \$170,000

Question 3

Explain why accounting income generally will differ from a firm's cash inflows.

Question 4

Suppose your firm is going to finance a new project 100% with retained earnings. Your boss claims that since the earnings are already being retained and that since no outside financing is required, the project should be evaluated at the risk-free rate of return. Is this appropriate? Why?

Question 5

A 2-year maturity bond with face value of \$1,000 makes annual coupon payments of \$80 and is selling at face value. What will be the rate of return on the bond if its yield to maturity at the end of the year is 6%?

Question 6

Castles in the Sand generates a rate of return of 20% on its investments and maintains a plowback ratio of 0.30. Its earnings this year will be \$4 per share. Investors expect a 12% rate of return on the stock.

- a. Find the price and P/E ratio of the firm.
- b. What happens to the P/E ratio if the plowback ratio is reduced to 0.20? Why?
- c. Show that if plowback equals zero, the earnings-price ratio, E/P, falls to the expected rate of return on the stock.

Question 7

You are a manager with an investment budget of \$8 million. You may invest in the following projects. Investment and cash-flow figures are in millions of dollars.

Project	Discount Rate, %	Investment	Annual Cash Flow	Project Life, Years
A	10	3	1	5
B	12	4	1	8
C	8	5	2	4
D	8	3	1.5	3
E	12	3	1	6

- Why might these projects have different discount rates?
- Which projects should the manager choose?
- Which projects will be chosen if there is no capital rationing?

Question 8

A firm is considering an investment in a new manufacturing plant. The site already is owned by the company, but existing buildings would need to be demolished. Which of the following should be treated as incremental cash flows?

- The market value of the site.
- The market value of the existing buildings.
- Demolition costs and site clearance.
- The cost of a new access road put in last year.
- Lost cash flows on other projects due to executive time spent on the new facility.

Question 9

An auto plant that costs \$100 million to build can produce a new line of cars that will produce cash flows with a present value of \$140 million if the line is successful but only \$50 million if it is unsuccessful. You believe that the probability of success is only about 50%. You learn whether the line is successful immediately after building the plant.

- Would you build the plant?
- Suppose that the plant can be sold for \$95 million to another automaker if the auto line is not successful. Now would you build the plant?

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Give two examples of the types of costs incurred by firms in financial distress.

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