

- 31) Determine which one of the following statements is TRUE with respect to a perfect capital market:
- (A) Taxes and transaction costs can exist.
  - (B) A firm's choice of capital structure will have an effect on its cost of capital.
  - (C) A firm's choice of capital structure will always have an effect on the firm's value.
  - (D) Leverage has no effect on the risk of equity, even where there is no default risk.
  - (E) The total value of a levered firm is equal to the total value of the firm without leverage..

7. A firm has the following capital structure:

	Market Value
Debt	5,000
Equity	10,000
Total	15,000

Current Share Price: 50

Expected Earnings Per Share (EPS): 6

Cost of New Debt: 5%

The firm would like to issue new debt and use the proceeds to repurchase equity.

Using the assumptions in Modigliani and Miller's Proposition I, determine the amount of new debt the firm must issue to achieve an expected ROE of 15% .

- (A) 2000
- (B) 3000
- (C) 4000
- (D) 5000
- (E) 6000

3. A company is financed by 1000 shares of stock with a current market value of 100 per share. The company decides to issue 50 5-year bonds with a par value of 100 and an annual coupon rate of 8% and use the proceeds to pay a cash dividend to the company's shareholders. The bonds sell at a market value that provides an annual effective yield of 10% .

Assuming that Modigliani-Miller Proposition I holds, what is the market value per share of the company's stock immediately after the dividend payment?

- (A) 95.0
- (B) 95.4
- (C) 100.0
- (D) 104.6
- (E) 105.0

40. Company X has a current stock price of 55 and a book equity per share of 18. Investors expect earnings per share of 2.0 for the year and a 1.2 cash dividend per share at the end of the year. Assume the company's payout ratio and return on equity are constant.

What is the market capitalization rate for Company X?

- A. 4.6%
- B. 5.6%
- C. 6.6%
- D. 7.6%
- E. 8.6%

41. Company X and Company Y each has the same cost of capital and identical asset portfolios with a market value of 1000.

Company X has zero debt. The expected return on equity for Company X is 15%.

The firm value of Company Y is made up of 50% debt and 50% equity. The expected return on debt for Company Y is 9%.

Assuming no taxes, what is the expected return on equity in Company Y?

- A. 9%
- B. 15%
- C. 21%
- D. 27%
- E. 33%

42. Which of the following are valid reasons for a stock split, assuming the efficient market theory is correct?

- I. To give shareholders a hedge against inflation.
- II. To allow shareholders to participate in the increase in book value.
- III. To keep the share price in a desirable trading price range.

- A. I only
- B. III only
- C. I and II only
- D. I and III only
- E. II and III only

43. The market value of a company's liabilities consists of 40 of debt and 80 of equity, for total liabilities of 120 .

The  $\beta$  for the company's debt and equity are 0.3 and 1.65, respectively. The expected return on the company's debt is 9% . The company has a weighted average cost of capital of 14% .

Which of the following statements are true, ignoring the effect of taxes?

- I. If the proceeds from issuing additional equity of 10 are used to retire 10 of debt, the company's cost of capital will increase to 14.6% .
- II. If a proposed new project has a  $\beta$  of 1.05, the project is riskier than the company's existing business.
- III. If the risk-free rate is 8%, then the expected risk premium on the market is 5% .

- (A) I only
- (B) II only
- (C) III only
- (D) I and II only
- (E) I and III only