QUIZ 3

I. True or False

1. A bond's yield to maturity (YTM) is the same thing as the before-tax cost of debt, k_d.
2. The tax advantage that comes from debt financing is of special benefit to a firm that is losing money.
3. The operating break-even point is the point at which operating profits equal revenues minus operating costs.
4. If EBIT were to remain constant while the firm incurred additional interest expense, the degree of financial leverage would increase.
5. If a company has no fixed costs, its DOL equals 1.
6. With corporate taxes, the value of the tax shield is the value of a leveraged firm less its value as an unleveraged firm.
7. The lower a firm's cost of capital, k_o, the higher the total valuation of the firm.
8. Modigliani and Miller maintain that it doesn't matter if a firm pays dividends or not; the effect of payments on shareholder wealth is offset exactly by other means of financing.
9. After a stock repurchase there are fewer shares of common stock outstanding and therefore, all other things equal, earnings per share is increased.
10. Both stock dividends and stock splits appear to send positive signals to the market about the company and often result in positive stock-price reactions.

II. Multiple Choice

1. The marginal cost of debt for Carnival Ltd. Is 10%, the expected return for shareholders is 16%, and the firm’s tax rate is 30%. If the firm’s target capital structure include 30% debt, the weighted average cost of capital is:

A. 7.00%

B. 9.31%

C. 10.00%

D. 13.30%

E. 16.00%

2. Which of the following statements correctly describe the impact of financial leverage under market conditions that are perfect except for the presence of corporate taxes?

   i. A levered firm is more valuable than an unlevered firm.

   ii. Firm value is maximized at 100% debt financing.

   iii. The weighted average cost of capital rises as leverage increases.

A. i only

B. ii only

C. iii only

D. i and ii only

3. A firm pays $100 in interest, $40 in preferred dividends, and $100 in common dividends. If the firm's tax rate is 30%, the minimum EBIT which must be earned to meet the above payments is:

A. $100,000

B. $140,000

C. $240,000

D. $300,000

4. An EBIT-EPS indifference analysis chart is used for

A. evaluating the effects of business risk on EPS.

B. examining EPS results for alternative financing plans at varying EBIT levels.

C. determining the impact of a change in sales on EBIT.

D. showing the changes in EPS quality over time.

5. Which one of the following conditions will *not* correctly reflect financial theory, principles and

practice?

A. As the probability of bankruptcy increases, the value of a levered firm increases.

B. Positive corporate taxes enable a levered firm to take advantage of a tax shield on interest expense.

C. At the EBIT-EPS indifference point, the EPS of alternative debt and equity financing plans are equal.

D. The times interest earned ratio reflects the ability of the firm to meet interest payments on debt.

6. Which of the following statement apply to a firm with a 10% perpetual bond, par value $50 million, and a corporate tax rate of 30%?

i. Firm value increases by $15 million relative to similar unlevered firm.

ii. Annual tax shield on interest is $3.5 million.

iii. The present value of interest tax shield at a discount rate of 10% is $15 million.

A. i only

B. ii only

C. iii only

D. i and iii only

7. If fixed cost is $10,000, the contribution margin percentage is 25%, and the sales at the breakeven point is:

A. $13,333

B. $20,000

C. $40,000

D. $56,667

8. The total debt of the company is 10%, $50,000 bank loan. EBIT is $25,000 and the DFL is:

A. 50

B. 25

C. 50

D. 75

9. A firm has $10m in 8% perpetual debt and a corporate tax rate of 25%. The present value of the tax shield on debt is:

A. $600,000

B. $800,000

C. $2.5m

D. $10m

10. Two firms that are virtually identical except for their capital structure are selling in the market at different values. According to M&M

A. one will be at greater risk of bankruptcy.

B. the firm with greater financial leverage will have the higher value.

C. this proves that markets cannot be efficient.

D. this will not continue because arbitrage will eventually cause the firms to sell at the same value.