a 1911

GESTÃO FINANCEIRA II Lic. - Undergraduate Degree

QUIZ (13.10.2017)

Name: ………………………………………………………………………………………. Number: ………………………..

<u>Answer each question by drawing a circle around the letter that, in your opinion, corresponds to the correct solution.</u>

1- A policy of maximizing the value of the firm is the same as a policy of minimizing the weighted average cost of capital providing that

a) An issue of new debt does not affect the market value of existing debt.

b) The firm's investment policy is settled, there are no taxes, and an issue of new debt does not affect the market value of existing debt.

c) There are no taxes.

d) The firm's investment policy is settled.

2- An investor owns 150 shares of DOWDUPONT common stock. It has a stock price of $60 and the earnings per share are $15, meaning that they have a 25% expected return. Its capital structure is composed by 100% equity (common stock). The company wishes to repurchase 40 percent of the stock and substitute it for an equal value of debt yielding 11 percent.

Knowing that the investor had the shares before the refinancing announcement, what should he do if he wishes to ensure that risk and expected return on his investment are unaffected by this refinancing?

a) Borrow $3,600 and buy 60 more shares.

b) Continue to hold 150 shares.

c) Sell 60 shares and purchase $3,600 of 11 percent debt (bonds).

d) Sell 11 percent of his stock and invest in bonds.

3- Value additivity works for

a) Combining assets, splitting up of assets, and the mix of debt securities issued by the firm.

b) Splitting up of assets.

c) Combining assets.

d) Combining assets and splitting up of assets.

4- Big Bang Company's book and market value balance sheets are:

Book Values				Market Values			
NWC	200	500	D	NWC	200	500	D
LTA	2300	2000	E	LTA	2800	2500	E
	2500	2500	V		3000	3000	V

(NWC = net working capital; LTA = long term assets; D = debt; E = equity; V = firm value)

According to MM's Proposition I corrected for taxes, assuming a 15% marginal corporate tax rate, what will be the change in company value if Big Bang issues $250 of equity and uses it to make a permanent reduction in the company's debt?

a) +$37,5

b) +$250

c) -$37,5

d) $0

5- What is the relative tax advantage of debt?

Assume that personal and corporate taxes are given by: TC (corporate tax rate) = 30%; TpE (personal tax rate on equity income) = 25%; and Tp (personal tax rate on interest income) = 15%.

a) 0,595

b) 1,261

c) 0,850

d) 1,619

6- Suppose that a company can direct $1 to either debt interest or to capital gains for equity investors. The capital gains tax rate is 10%. Which investor would not care how the money is channeled? (The marginal corporate tax rate is 30%).

a) Investors paying zero personal tax

b) Investors paying a personal tax rate of 7%

c) Investors paying a personal tax rate of 37%

d) Investors paying a personal tax rate of 63%

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Name: …………………………………………………………………………………………. Number: ……………………….

Answer each question by drawing a circle around the letter that, in your opinion, corresponds to the correct solution.

1- Modigliani and Miller's Proposition I states that

a) The market value of a firm's debt is independent of its capital structure.

b) The market value of any firm is independent of its capital structure.

c) None of the options are correct.

d) The market value of a firm's common stock is independent of its capital structure.

2- An investor owns 50 shares of DOWDUPONT common stock. It has a stock price of $50, a 25% expected return ($12,5 earnings per share) and its capital structure is composed by 100% equity (common stock). The company wishes to change its capital structure and so repurchase 30% of the stock and substitute it for an equal value of debt yielding 10%.

Knowing that the investor had the shares before the refinancing announcement, what should he do if he wishes to ensure that risk and expected return on his investment are unaffected by this refinancing?

a) Borrow $750 and buy 15 more shares.

b) Sell 15 shares and purchase $750 of 10 percent debt (bonds).

c) Sell 10 percent of his stock and invest in bonds.

d) Continue to hold 50 shares.

3- The law of conservation of value implies that

a) The mix of convertible and nonconvertible debt does not affect the value of the firm.

b) The mix of senior and subordinated debt does not affect the value of the firm, the mix of convertible and nonconvertible debt does not affect the value of the firm, and the mix of common stock and preferred stock does not affect the value of the firm.

c) The mix of senior and subordinated debt does not affect the value of the firm.

d) The mix of common stock and preferred stock does not affect the value of the firm.

4- ABC Company's book and market value balance sheets are:

Book Values				Market Values			
NWC	200	500	D	NWC	200	500	D
LTA	2300	2000	E	LTA	2800	2500	E
	2500	2500	V		3000	3000	V

(NWC = net working capital; LTA = long term assets; D = debt; E = equity; V = firm value)

According to MM's Proposition I corrected for taxes, what will be the change in company's value if ABC issues $220 of equity and uses it to make a permanent reduction in the company's debt? Assume a 35% marginal corporate tax rate.

a) $0

b) -$77

c) +$220

d) +$77

5- What is the relative tax advantage of debt?

Assume that personal and corporate taxes are given by:

TC (corporate tax rate) = 40%;

TpE (personal tax rate on equity income) = 30% and

Tp (personal tax rate on interest income) = 25%.

a) 1,556

b) 0,750

c) 1,786

d) 0,450

6- Suppose that a company can direct $1 to either debt interest or to capital gains for equity investors. The capital gains tax rate is 15%. Which investor would not care how the money is channeled? (The marginal corporate tax rate is 25%).

a) Investors paying a personal tax rate of 36%

b) Investors paying a personal tax rate of 11%

c) Investors paying a personal tax rate of 64%

d) Investors paying zero personal tax

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Answer each question by drawing a circle around the letter that, in your opinion, corresponds to the correct solution.

1- A policy of maximizing the value of the firm is the same as a policy of minimizing the weighted average cost of capital providing that

a) The firm's investment policy is settled, there are no taxes, and an issue of new debt does not affect the market value of existing debt.
b) There are no taxes.
c) An issue of new debt does not affect the market value of existing debt.
d) The firm's investment policy is settled.

2- An investor owns 100 shares of DOWDUPONT common stock. It has a stock price of $60, its capital structure is composed by 100% equity (common stock) and the expected return is 15%, which means that earnings per share are $9. The company wishes to repurchase 40 percent of the stock and substitute it for an equal value of debt yielding 12%.

Knowing that the investor had the shares before the refinancing announcement, what should he do if he wishes to ensure that risk and expected return on his investment are unaffected by this refinancing?

a) Borrow $2400 and buy 40 more shares.
b) Sell 12 percent of his stock and invest in bonds.
c) Continue to hold 100 shares.
d) Sell 40 shares and purchase $2,400 of 12 percent debt (bonds).

3- Value additivity works for

e) Combining assets.
f) Splitting up of assets.
g) Combining assets, splitting up of assets, and the mix of debt securities issued by the firm.
h) Combining assets and splitting up of assets.

4- Big Bang Company's book and market value balance sheets are:

Book Values				Market Values			
NWC	200	500	D	NWC	200	500	D
LTA	2300	2000	E	LTA	2800	2500	E
	2500	2500	V		3000	3000	V

(NWC = net working capital; LTA = long term assets; D = debt; E = equity; V = firm value)

According to MM's Proposition I corrected for taxes, assuming a 25% marginal corporate tax rate, what will be the change in company value if Big Bang issues $100 of equity and uses it to make a permanent reduction in the company's debt?

a) +$100
b) -$25
c) +$25
d) $0

5- What is the relative tax advantage of debt?

Assume that personal and corporate taxes are given by: TC (corporate tax rate) = 10%; TpE (personal tax rate on equity income) = 30% and Tp (personal tax rate on interest income) = 15%.

a) 1,349
b) 0,850
c) 0,765
d) 0,915

6- Suppose that a company can direct $1 to either debt interest or to capital gains for equity investors. The capital gains tax rate is 10%. Which investor would not care how the money is channeled? (The marginal corporate tax rate is 20%).

a) Investors paying a personal tax rate of 8%
b) Investors paying zero personal tax
c) Investors paying a personal tax rate of 28%
d) Investors paying a personal tax rate of 72%

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<u>Answer each question by drawing a circle around the letter that, in your opinion, corresponds to the correct solution.</u>

1- Modigliani and Miller's Proposition I states that

a) The market value of a firm's debt is independent of its capital structure.

b) None of the options are correct.

c) The market value of a firm's common stock is independent of its capital structure.

d) The market value of any firm is independent of its capital structure.

2- DOWDUPONT Company is financed entirely by common stock that is priced to offer a 30% expected rate of return. The stock price is $50 and the earnings per share are $15. The company wishes to repurchase 30% of the stock and substitutes an equal value of debt yielding 10%. Before refinancing, an investor owned 150 shares of DOWDUPONT common stock. What should he do if he wishes to ensure that risk and expected return on his investment are unaffected by this refinancing?

a) Borrow $2,250 and buy 45 more shares

b) Continue to hold 150 shares.

c) Sell 45 shares and purchase $2,250 of 10 percent debt (bonds).

d) Sell 10 percent of his stock and invest in bonds.

3- The law of conservation of value implies that

a) The mix of senior and subordinated debt does not affect the value of the firm.

b) The mix of convertible and nonconvertible debt does not affect the value of the firm.

c) The mix of senior and subordinated debt does not affect the value of the firm, the mix of convertible and nonconvertible debt does not affect the value of the firm, and the mix of common stock and preferred stock does not affect the value of the firm.

d) The mix of common stock and preferred stock does not affect the value of the firm.

4- ABC Company's book and market value balance sheets are:

Book Values				Market Values			
NWC	200	500	D	NWC	200	500	D
LTA	2300	2000	E	LTA	2800	2500	E
	2500	2500	V		3000	3000	V

(NWC = net working capital; LTA = long term assets; D = debt; E = equity; V = firm value)

According to MM's Proposition I corrected for taxes, what will be the change in company value if ABC issues $150 of equity and uses it to make a permanent reduction in the company's debt? Assume a 15% marginal corporate tax rate.

a) -$22,5

b) +$0

c) +$22,5

d) +$150

5- What is the relative tax advantage of debt?

Assume that personal and corporate taxes are given by:

TC (corporate tax rate) = 20%;

TpE (personal tax rate on equity income) = 15% and

Tp (personal tax rate on interest income) = 20%.

a) 0,800

b) 1,176

c) 0,640

d) 1,328

6- Suppose that a company can direct $1 to either debt interest or to capital gains for equity investors. The capital gains tax rate is 15%. Which investor would not care how the money is channeled? (The marginal corporate tax rate is 20%).

a) Investors paying zero personal tax

b) Investors paying a personal tax rate of 12%

c) Investors paying a personal tax rate of 32%

d) Investors paying a personal tax rate of 68%