

These questions are all from our slides.

I highly suggest you read slides first. When you do questions, do not look at the slides to make sure you know how to solve these questions (these questions are from our slides). This will be more or less the style of our exams.

1. What is the joint hypothesis problem when testing market efficiency?
2. When we observe an arbitrage opportunity, can we always make money? Please give an example to illustrate your point of view.
3. What are the advantages and disadvantages of issuing debt? One example for advantage and one for disadvantage.
4. What are the advantages and disadvantages of issuing equity? One example for advantage and one for disadvantage.
5. Harald Inc has 100 shares outstanding. There are four seats on its board of directors. Patrick owns 75 shares and Natasha owns 25 shares. Patrick does not want Natasha to be on board of directors:

In case of cumulative voting, can Patrick successfully crowd out Natasha?

6. Firm A wants \$1,000 financing either in the form of debt @ 10% or preferred stock at 6.7% percent dividend. Federal government imposes 40% tax on issuer of preferred stock. This is refunded to taxable issuer. However, Zero tax is not paying any taxes.
Firm B is taxable @ 45% as an investor of Firm A.

What is the after tax cost for Firm A if issuing preferred stock?

What is the after tax cost for Firm A if issuing debt?

What is the after tax yield for Firm B if investing in Firm A's preferred stock?

What is the after tax yield for Firm B if investing in Firm A's debt?

7. Trans Can Corporation
 - a. Currently No Debt
 - b. Number of Shares Outstanding is 400, Price per Share is \$20
 - c. Interest Rate is 10%
 - d. Issue \$4,000 in Debt to Buy Back Shares
 - e. Earnings 1,200 expected, \$400 during recession and \$2,000 during expansion

What is the EPS in recession without debt?

What is the EPS in recession with debt?

Under what condition that TCC with debt is better off than it is without debt?
8. Continue the TCC question, if strategy A says
Strategy A: Buy 100 Shares in Levered Trans Can Corporation
Can you come up a homemade leverage strategy that gives the same earnings as strategy A?
9. What are MM propositions?
10. What is the intuition that cost of equity is increasing with firm leverage under MM framework?

11. When we add corporate taxes into MM framework, cost of equity becomes lower or higher? Why?
12. When we add corporate taxes into MM framework, cost of capital becomes lower or higher? Why?
13. Lutheran Motors is an all equity firm with perpetual cashflows of \$10 million forever. There are 10 million shares outstanding. The cost of capital for the unlevered firm is 10%. Firm plans to build a new plant that will cost \$ 4 million. The plant is expected to generate additional cashflow of \$1 million forever. The firm will issue \$4 million of either equity or debt. Show the effects of different financing methods on value of firm, cost of equity and price per share. There are no taxes in the economy.
14. Water Corporate has a tax rate of 40% and expects EBIT of \$ 1 Million. Its entire earnings after taxes are paid out as dividends. The firm is considering two alternative capital structures. Under Plan I, Water Products has no debt in its capital structure. Under Plan II, the company would have \$ 4,000,000 of Debt, B. The cost of debt is 10%. What is the amount of Tax savings under plan II?
15. Dividend Airline is currently an all equity firm. Its management is considering changing its capital structure. The company has perpetual earnings \$ 166.67 before interest and taxes (EBIT). It faces corporate tax rate of 40% and thus has after tax cashflow of \$100. Its cost of debt capital is 10%. Unlevered firms in the same industry have cost of equity of 20%. The management wants to issue 200 of debt and use the proceeds to buy back the existing shares. What will be value of the firm, WACC and cost of equity after the debt issue?