

ECO352 - Review for 1st exam

1. An investor purchased a call option that allows her to purchase 100 shares of Dell Computer common stock for \$45 per share any time during the next six months. The price she paid for the option was \$2.50 per share, or \$250 total, and the current market price of Dell's stock is \$42.50. If the price of Dell increases to \$50 and the investor decides to exercise it, what will be the gain or loss that results from the option position that was held? Ignore taxes and commissions.

2. Assume the securities are all issued by the same firm. From the *investor's* standpoint, rank the following securities in order of increasing risk (the number of the least risky security is placed first, or to the left, in the answer set).

Preferred stock.

Convertible preferred stock.

Mortgage bonds.

3. Rollincoast Incorporated issued BBB bonds two years ago that provided a yield to maturity of 11.5 percent. Long-term risk-free government bonds were yielding 8.7 percent at that time. The current risk premium on BBB bonds versus government bonds is half what it was two years ago. If the risk-free long-term governments are currently yielding 7.8 percent, then at what rate should Rollincoast expect to issue new bonds?

4. An investor purchased a call option that allows her to purchase 100 shares of Dell Computer common stock for \$45 per share any time during the next six months. The price she paid for the option was \$2.50 per share, or \$250 total, and the current market price of Dell's stock is \$42.50. If the price of Dell increases to \$44.50 and the investor decides to exercise it, what will be the gain or loss that results from the option position that was held? Ignore taxes and commissions.

5. Sharon has a convertible bond with a face value of \$1,000 that can be converted into 40 shares of common stock of Mountain Ice Corporation. If the current price of the stock is \$20, what is the conversion price of the bond?

6. What do most American investors who are interested in companies listed on foreign exchanges purchase? Explain how it works.

7. Explain why the following long-term government and corporate bonds have all different interest rates.

8. Assume that the expectations theory holds, and that liquidity and maturity risk premiums are zero. If the annual rate of interest on a 2-year Treasury bond is 10.5 percent and the rate on a 1-year Treasury bond is 12 percent, what rate of interest should you expect on a 1-year Treasury bond one year from now?

9. Your corporation has the following cash flows:

Operating income	\$250,000
Interest received	10,000
Interest paid	45,000
Dividends received	20,000
Dividends paid	50,000

If the applicable average income tax rate is 40 percent, and if 70 percent of dividends received are exempt from taxes, what is the corporation's tax liability?

10. Your corporation has the following cash flows:

Operating income	\$250,000
Interest received	10,000
Interest paid	45,000
Dividends received	20,000
Dividends paid	50,000

If 70 percent of dividends received are excludable, and if the applicable tax table is as follows,

<u>Taxable Income</u>	<u>Rate</u>
\$0 – \$50,000	15%
50,000 – 75,000	25
75,000 – 100,000	34
100,000 – 335,000	39
over \$335,000	34

What is the corporation's tax liability?

11. Carter Corporation has some money to invest, and its treasurer is choosing between City of Chicago municipal bonds and U.S. Treasury bonds. Both have the same maturity, and they are equally risky and liquid. If Treasury bonds yield 6 percent, and Carter's marginal income tax rate is 40 percent, what yield on the Chicago municipal bonds would make Carter's treasurer indifferent between the two?

12. Tapley Dental Supply Company has the following data:

Net income: \$240
Debt ratio: 75%

Sales: \$10,000
TIE ratio: 2.0

Total assets: \$6,000
Current ratio: 1.2

If Tapley could streamline operations, cut operating costs, and raise net income to \$300, without affecting sales or the balance sheet (the additional profits will be paid out as dividends), by how much would its ROE increase?

13. 28. The Charleston Company is a relatively small, privately owned firm. Last year the company had after-tax income of \$15,000, and 10,000 shares were outstanding. The owners were trying to determine the market value for the stock, prior to taking the company public. A similar firm which is publicly traded had a price/earnings ratio of 5.0. Using only the information given, estimate the market value of one share of Charleston's stock.

14. The firm A has a profit margin of 15 percent on sales of \$20,000,000. If the firm has debt of \$7,500,000, total assets of \$22,500,000, and an after-tax interest cost on total debt of 5 percent. The firm B has a profit margin of 20 percent on sales of 15,000,000. If the firm B has debt of 6,500,000, total assets of 18,500,000 and an after tax interest cost on total debt of 5 percent.

Then which firm's ROA is better?

15. A firm has total interest charges of \$10,000 per year, sales of \$1 million, a tax rate of 40 percent, and a net profit margin of 6 percent. What is the firm's times-interest-earned ratio? How would you interpret this ratio as an investor?

16. Monetary policy refers to the strategies employed by a central bank with regard to the amount of money circulating in the economy. **Under stock market crash**, what kinds of monetary policies will you recommend? State at least two types of monetary policy with a brief description.

17. Monetary policy refers to the strategies employed by a central bank with regard to the amount of money circulating in the economy. **Under stock market boom**, what kinds of monetary policies will you recommend? State at least two types of monetary policy with a brief description.