Finance 300 Spring 1999 Exam 2 Joe Smolira

***Multiple Choice - Put all answers on the answer key - 18 questions - 72 total points***

1. Protective covenants are offered for the protection of
    a. common stockholders
    b. preferred stockholders
    c. bondholders
    d. corporate management
    e. None of the above

2. Which of the following forms of debt would be likely to offer debtholders the highest interest rate?

    a. Secured debt that is not callable
    b. Secured, callable debt with a sinking fund
    c. Subordinated debt with sinking fund
    d. Subordinated debt that is callable
    e. Insufficient Information

3. You own 500 shares of Chrysler stock. Kirk Kekorian sends you a letter and asks you for your proxy. He is asking:

    a. to buy your stock at the current market price
    b. to buy your stock at a premium
    c. for the voting rights on your stock
    d. for an option to buy your stock at a later date

4. If the market interest rate is ______ the coupon rate then a bond will sell for a ______.

    a. above , premium
    b. below , discount
    c. below , par
    d. above , discount

5. The Easter Egg Corp. stock just paid a dividend of $1.98. The firm's growth rate is 6 percent. If you require a 10 percent rate of return on the stock, what is the most you would be willing to pay for the stock today?

    a. $ 44.25
    b. $ 49.50
    c. $ 52.47
    d. $ 74.50
    e. $ 78.97

6. Two projects are mutually exclusive. Project A has an IRR of 10% and Project B has an IRR of 14%. The cost of capital is 8%. You should accept:

a. Project B since the IRR is higher
b. both projects since each IRR is greater than the cost of capital
c. Project A since the IRR is closer to the cost of capital
d. unable to determine from information provided

7. Last year you bought a zero coupon bond with a maturity of 8 years, a return of 12% and a par value of $1,000. This year when preparing your taxes, how much interest income should you report from this transaction?

a. $ 0
b. $ 48
c. $ 54
d. $ 64
e. insufficient information

8. Which NYSE member is typically an employee of a brokerage company such as Merrill Lynch?

a. commission broker
b. specialist
c. floor broker
d. floor trader
e. market maker

9. A ___________ is the owner of a seat on the New York Stock Exchange.

a. broker
b. dealer
c. floor trader
d. specialist
e. member

10. The ____________ is known as the term structure of interest rates.

a. inflation premium
b. interest rate risk premium
c. Fisher effect
d. relationship between short- and long-term interest rates
e. municipal bond yield curve

11. According to the Gordon Growth Model, a decrease in _______ should lead to an _____________ in the stock's price.

a. the required rate of return, increase
b. the growth rate, increase
c. the most recent dividend ($D_0$), increase
d. none of the above

12. You earn a 5% real return. If the inflation rate is 4%, what is you nominal return?

a. .99%
b. 9.0%
c. 9.2%
d. 10.0%
e. 10.24%

13. Which of the following statements is *false*? (Assume conventional cash flows.)
a. the NPV will be positive if the IRR is less than the cost of capital
b. if the multiple IRR problem does not exist, any independent project acceptable by the NPV method will also be acceptable by the IRR method.
c. when IRR=cost of capital, NPV=0
d. the IRR can be positive even if the NPV is negative
e. the NPV method is not affected by the multiple IRR problem

14. You feel that your company can sell 100,000 units of a new mid-priced product at $40.00 each. You also feel that your company will lose sales of 15,000 units of the expensive model at $50 each and gain 10,000 units of sales of the cheaper model at $30.00 each. What figure should you use for the change in sales when doing the capital budgeting?

a. $3,000,000
b. $3,250,000
c. $3,550,000
d. $4,000,000
e. $5,050,000

15. Project A has conventional cash flows and is acceptable according to the NPV criterion. If the required rate of return is 12 percent, then

a. the project will be acceptable using the IRR criterion.
b. the project will be rejected under the IRR criterion.
c. the project could be accepted or rejected depending on whether the IRR is greater than or less than 12 percent.
d. the project will be accepted only if the IRR is equal to 12 percent.

16. IBM has a bond outstanding with a par value of $10,000, a coupon rate of 8% paid semi-annually and a maturity of 7 years. If the YTM is 6%, what is the price of the bond?

a. $ 8,492
b. $ 9,010
c. $ 10,000
d. $ 11,129
e. $ 11,857

17. Careers Unlimited issued a bond with a par value of $1000. The bond has 8 years remaining to maturity and an annual coupon rate of 5 percent. If the current market price is $880.55, what is the yield to maturity?

a. 4.3%
b. 7.0%
c. 9.1%
d. 10.2%

18. If two bonds are selling at a premium and are alike in all ways except the number of years to maturity, which will have the higher price today - one with 5 or 15 years to maturity (all else constant)?

a. the 5 year bond
b. the 15 year bond
c. they will have the same price
d. cannot be determined

***Partial Credit Problems - Show All Work - 28 points***

***Problem 1 ( 10 points)***

Mama Mia's, Inc. has developed a new line of fat-free, cholesterol-free, no salt and no sugar spaghetti sauce. The company has developed a sales forecast of $520,000 per year, with combined fixed and variable costs of $245,000 per year. If the company undertakes the project, it will require an investment of $660,000 in plant and equipment that will be depreciated toward a zero salvage value on a straight-line basis. Other relevant costs are an initial investment of $95,000 in inventory that will be returned at the end of the product life, and $120,000 that was required for research and development of the product. The product life will be 6 years, the cost of capital is 10% and the tax rate is 30%. Calculate:

A) The payback period
B) The NPV
C) The IRR
D) Should Pappy's accept the product line? YES / NO

***Problem 2 ( 9 points)***

Assume that it is February 1999. Find the Treasury bond that matures in February 2027. What is the Ask Yld.? What happened to interest rates on this day?

**The actual quote was:**

| Rate | Maturity Mo./Yr. | Bid | Asked | Chg | Ask Yld. |
|---|---|---|---|---|---|
| 6 5/8 | Feb27 | 111:25 | 111:29 | -23 | |

***Problem 3 ( 9 points)***

Whatchamacallit, Inc. has an unusual dividend policy. They plan to pay dividends of $10.75, $8.50 and $3.00 for the next three years starting one year from now. After the third dividend is paid is it expected that the dividends will grow by 7% a year forever. If you require a 14% return on you investment, how should you pay for the stock?

**Answer Key** **Spring 1999** **Exam 2**

| | |
|---|---|
| 1 | C |
| 2 | D |
| 3 | C |
| 4 | D |
| 5 | C |
| 6 | D |
| 7 | B |
| 8 | A |
| 9 | E |
| 10 | D |
| 11 | A |
| 12 | C |
| 13 | A |
| 14 | C |
| 15 | A |
| 16 | D |
| 17 | B |
| 18 | B |

#1
ICO = <$755,000>
CF1 through CF5 = $225,500
CF6 = $320,500
Payback = 3.35 years
NPV = $280,736.31
IRR = 21.36%

#2
5.76%, interest rates increased

#3
$48.95