## SMN224 - Tutorial assignment for topic 4

Topic 4: Bonds and stocks

1. A bond that makes no coupon payments and is initially priced at a deep discount is called a \_\_\_\_\_ bond.

A. Treasury

B. municipal

C. floating-rate

D. junk

E. zero coupon

2. Next year's annual dividend divided by the current stock price is called the:

A. yield to maturity.

B. total yield.

C. dividend yield.

D. capital gains yield.

E. earnings yield.

3. The rate at which a stock's price is expected to appreciate (or depreciate) is called the

\_\_\_\_\_ yield. A. current

B. total

C. dividend

D. capital gains

E. earnings

4. A bond with a 7% coupon with a face value of  $\pounds 1000$  that pays interest semi-annually and is priced at par will have a market price of \_\_\_\_\_ and interest payments in the amount of

each. A. £1,007; £70 B. £1,070; £35 C. £1,070; £70 D. £1,000; £35

E. £1,000; £70

5. All else constant, a bond will sell at \_\_\_\_\_ when the yield to maturity is \_\_\_\_\_ the coupon rate.

A. a premium; higher than

B. a premium; equal to

C. at par; higher than

D. at par; less than

E. a discount; higher than

6. The market price of a bond is equal to the present value of the:

A. face value minus the present value of the annuity payments.

B. annuity payments plus the future value of the face amount.

C. face value plus the present value of the annuity payments.

D. face value plus the future value of the annuity payments.

E. annuity payments minus the face value of the bond.

7. The yield to maturity is:

A. the rate that equates the price of the bond with the discounted cash flows.

B. the expected rate to be earned if held to maturity.

C. the rate that is implied by the current market price of the bond.

D. equal to the current yield for bonds priced at par.

E. All of the above.

8. The value of common stock today depends on:

A. the expected future holding period and the discount rate.

B. the expected future dividends and the capital gains.

C. the expected future dividends, capital gains and the discount rate.

D. the expected future holding period and capital gains.

E. None of the above.

9. The bonds issued by Turner & Sons bear a 6% coupon, payable semiannually. The bond matures in 8 years and has a £1,000 face value. Currently, the bond sells at par. What is the yield to maturity?

A. 5.87%

B. 5.97%

C. 6.00%

D. 6.09%

E. 6.17%

10. Your firm offers a 10-year, zero coupon bond. The yield to maturity is 8.8%. What is the current market price of a  $\pm 1,000$  face value bond?

A. £430.24 B. £473.26 C. £835.56 D. £919.12

E. £1,088.00

11. The MerryWeather Firm wants to raise  $\pounds 10$  million to expand its business. To accomplish this, it plans to sell 30-year,  $\pounds 1,000$  face value zero-coupon bonds. The bonds will be priced to yield 6%. What is the minimum number of bonds it must sell to raise the  $\pounds 10$  million it needs?

A. 47,411 B. 52,667 C. 57,435

D. 60,000

E. 117,435

12. Angelina's made two announcements concerning its common stock today. First, the company announced that its next annual dividend has been set at £2.16 a share. Secondly, the company announced that all future dividends will increase by 4% annually. What is the maximum amount you should pay to purchase a share of Angelina's stock if your goal is to earn a 10% rate of return?

A. £21.60

B. £22.46 C. £27.44

- D. £34.62
- E. £36.00

13. Lee Hong Imports paid a  $\pm 1.00$  per share annual dividend last week. Dividends are expected to increase by 5% annually. What is one share of this stock worth to you today if the appropriate discount rate is 14%?

A. £7.14 B. £7.50 C. £11.11 D. £11.67 E. £12.25

14. Martin's Yachts has paid annual dividends of £1.40, £1.75, and £2.00 a share over the past three years, respectively. The company now predicts that it will maintain a constant dividend since its business has leveled off and sales are expected to remain relatively constant. Given the lack of future growth, you will only buy this stock if you can earn at least a 15% rate of return. What is the maximum amount you are willing to pay to buy one share today?

A. £10.00 B. £13.33 C. £16.67 D. £18.88 E. £20.00

15. Given the opportunity to invest in one of the three bonds listed below, which would you purchase if the discount rate is 7% ?

Bond	Face Value	Annual Coupon Rate	Maturity Price
A	\$1,000	4%	1 year \$990
В	\$1,000	7.5%	17 years \$990
С	\$1,000	8.5%	25 years \$990