Second Midterm Exam

Fall 2020 Econ 180-367

1. Which of the following is the most standard annual fee structure for hedge funds?
A. 2 percent of the value of the assets and 1 percent of the profits.
B. 1 percent of the value of the assets and 2 percent of the profits.
C. 20 percent of the value of the assets and 2 percent of the profits.
D. 2 percent of the value of the assets and 20 percent of the profits.
E. 2 percent of the value of the assets and 2 percent of the profits.

2. Which of the following is the current approximate yield spread of BAA corporates over Treasuries?
A. 2.5 percent.
B. 4 percent.
C. 6 percent.
D. 8 percent.
E. 10 percent.

3. Which of the following is a typical recovery rate following a corporate default?
A. 10 percent.
B. 20 percent
C. 50 percent.
D. 80 percent.
E. 90 percent.

4. Which of the following is closest to the current 10-year TIPS yield?
A. Negative 90 basis points.
B. Zero percent.
C. 70 basis points.
D. 90 basis points.
E. 2 percentage points.

5. How often are coupon payments made on US Treasury securities?
A. Once every week.
B. Once every month.
C. Four times a year.
D. Twice a year.
E. Once every year.

6. How many US corporations currently have AAA credit ratings from Standard and Poors?
A. 2.
B. 15.
C. 46.
D. 251.
E. Over 500.

7. You buy a US Treasury bond with a 4% annual coupon rate for settlement 46 days since the last coupon. There are 184 days between the last and the next coupon. The clean price is $101. What is the dirty price?
A. $100.00.
B. $100.50.
C. $101.00.
D. $101.50.
E. $102.00.

8. Which of the following is the name given to the phenomenon where investors try to avoid investments in which they do not know the odds of different outcomes?
A. Ambiguity aversion.
B. Prospect theory.
C. Anchoring.
D. Loss aversion.
E. The leverage cycle.

9. Suppose that the one-year interest rate is 2 percent, the two-year interest rate is 2.5 percent, and that the expectations hypothesis of the term structure holds. What must be the approximate expected one-year interest rate be in one years time?
A. 1 percent.
B. 1.5 percent.
C. 2 percent.
D. 3 percent.
E. 4 percent.

10. In March 2000, 3Com announced that at the end of that year, it would give their shareholders 1.5 shares in Palm for each 3Com share they owned. After the announcement, the price of a share in 3Com was $81.11. The price of a share of Palm was $95.06. Which of the following is the implied arbitrage strategy?
A. Buy 1 share in Palm and short 1.5 shares in 3Com
B. Buy 1 share in 3Com and short 1.5 shares in Palm
C. Buy 1.5 shares in Palm and short 1 share in 3Com
D. Buy 1.5 shares in 3Com and short 1.5 shares in Palm

11. What is the difference between a closed end fund and an open end fund?
A. A closed end fund can only be purchased by high net worth individuals whereas open end funds are available to the public
B. A closed end fund has a fixed number of shares outstanding whereas an open end fund can increase or decrease the number of shares
C. A closed end fund is open only to US citizens whereas an open end fund is open to international investors
D. An open end fund is listed on the stock exchange whereas a closed end fund is not

12. Coval and Shumway found that traders who made gains in the morning were more cautious in the afternoon than traders who made losses in the morning. Which phenomenon is this an example of?
A. Ambiguity aversion.

B. Risk aversion.
C. Anchoring.
D. Loss aversion.
E. Overconfidence.

13. What is the historical relationship between dividend yields and future subsequent returns?
A. Dividend yields have no relationship with future stock returns
B. There is a weak tendency for higher dividend yields to predict higher future stock returns
C. There is a weak tendency for higher dividend yields to predict lower future stock returns
D. Higher dividend yields are strong predictors of future lower stock returns

14. A 30 year bond has a 3 percent coupon rate. The face value is $100 and it is currently trading for $95. What is it's yield to maturity (with semiannual compounding).
A.2.26 percent.
B.2.45 percent
C.2.86 percent
D. 3 percent.
E. 3.26 percent.

15. Which of the following is one of the three factors in the Fama-French three factor model.
A. The return on a portfolio of small stocks less the return on a portfolio of big stocks.
B. The return on a portfolio of stocks that had high returns in the past less the return on a portfolio of stocks that had low returns in the past.
C. Inflation.
D. GDP growth.

16. A 20-year zero coupon bond with a face value of $100 costs $50. What is the yield to maturity (with semiannual compounding)?

17. A 2 percent bond paying coupons semiannually trades at par. After 6 months, you sell the bond for $101. What was your holding period return on the bond over these 6 months?

18. The two-year zero coupon yield is 50 basis points and the three-year zero coupon yield is 1 percentage point. What is the forward rate from two to three years' hence?

19. Consider the following data for a one-factor economy. All portfolios are well diversified.

Portfolio	Expected Return	Beta
A	12%	1.2
B	?	1
F	6%	0

According to APT, what is the expected return on portfolio B?

20. Consider the same setup as in question 19, but suppose that another portfolio, portfolio E, is well diversified with a beta of 2 and an expected return of 15%. An arbitrage opportunity exists. What would be the arbitrage strategy?

21. Suppose that Remsen Enterprises earnings will be 1 dollar per share next year, and the retention rate is 25%. Earnings will grow at a 4 percent annual rate forever. The required rate of return on Remsen Enterprises stock is 5 percent. According to the dividend discount model, what is the market price of Remsen shares today?

22. A ten-year bond has a 2.5% coupon rate (paid semiannually). The face value is $100, but it trades for $105. The zero-coupon ten-year bond costs $70. Assuming no arbitrage, what is the price of a ten-year bond with a 5% coupon rate?

23. A perpetuity costs $50 and pays $3 per year in coupons. What is the yield to maturity for this perpetuity (with annual compounding)?

Solutions.

1. D.
2. A.
3. C.
4. A.
5. D.
6. A.
7. D.
8. A.
9. D.
10. B.
11. B.
12. D.
13. B.
14. E.
15. A.
16. 3.5 percent.
17. 2 percent.
18. 2.01 percent (2 percent is acceptable).
19. 8 percent.
20. Go long $100 in B and short $100 in E. No need to borrow or lend at the riskfree rate.
21. $75.
22. $140.
23. 6 percent.