

CB3044 Mock exam

1. A

Prices of longer-maturity bonds respond more dramatically to changes in interest rates. Since longer the time to maturity, higher the interest rate risk. It is likely to face fluctuations in interest rates. Prices and returns for long-term bonds are more volatile than those for shorter-term bonds. Investments in long-term bonds are quite risky due, among other things, to interest rate risk.

2. B

Duration is a weighted average of the maturities of the cash payments. Duration is additive. The duration of a portfolio of securities is the weighted average of the durations of the individual securities, with the weights equaling the proportion of the portfolio invested in each security.

3. D

U.S. Treasury bonds are the most liquid of all long-term bonds because they are so widely traded that they are the easiest to sell quickly and the cost of selling them is low.

4. A

Yield curve is typically upward sloping as explained by Term Structure of Interest Rate. People typically prefer short holding periods and thus have higher demand for short short-term bonds, which have higher price and lower interest rates than long bonds. It is explained by Market Segmentation Theory and Liquidity Premium Theory.

5. D

Random-Walk Behavior of Stock Prices means that future changes in stock prices should, for all practical purposes, be unpredictable. The movement of stock price is random.

6. B

Strong Form Efficiency means that stock prices reflect all information, including public and private, rather than past, present, and future information.

7. D

Conflicts of interest are a type of moral hazard that occurs when a person or institution has multiple interests, and serving one interest is detrimental to the other. It is likely to occur when a financial institution provides multiple services. The financial institution is expected to provide reliable information to the public. For example, the auditor is expected to provide an unbiased opinion of the firm's financial health. However, the auditor has incentives not to do so if he or she is receiving higher consulting fees than the auditing fees. This is Conflicts of interest.

8. A

The credit-rating agencies assign a credit rating to a security issuance of a firm based on projected cash flow, assets pledged, etc. The rating helps determine the riskiness of a security. However, the credit-rating agencies get paid from the firm. The firm may

ask the rater to help provide the highest possible rating. The rating agencies received high fees from the firm have incentive to give favorable ratings to attract more business. It acts favorable to those who are willing to pay.

9. A

Treasury bills do not pay interest because their maturity dates are short. They have a maturity of one year or less. When an investor pays less for the security than it will be worth when it matures, and the increase in price provides a return.

10. B

The Fed will buy bonds in the open market to make more reserves available, which places downward pressure on the Federal funds rate. If there is a surplus of reserves, the Federal Funds rate will fall below its targeted level. The federal funds interest rate will lower.

11. C

To sell an old bond when interest rates have risen, the holder will have to discount the bond until the yield to the buyer is the same as the market rate. The bond refers to discount bond where the par value is greater than the bond price. The YTM is greater than the coupon rate. Interest rate risk is the number one source of risk, major cause of price volatility in the bond market. Longer the time to maturity, higher the interest rate risk. The interest rate increase will lead to a decrease in price.

12. C

Change in current yield always signals change in same direction as yield to maturity. The current yield better approximates the yield to maturity when the bond's price is nearer to the bond's par value and the maturity of the bond is longer. It become a worse approximation when the bond's price is further from the bond's par value and the bond's maturity is shorter.

13. C

Use the Gordon growth model,

$$P_0 = D_0 * (1+g) / (R-g) = 1 * (1+10\%) / (15\% - 10\%) = 1.1 / 0.05 = 22$$

Valuation of a stock = \$22

14. D

The PE ratio approach to valuing stock is especially useful for valuing privately held firms and firms that don't pay dividends, rather than publicly held corporations and firms that regularly pay dividends. This approach uses the price earnings ratio earnings per share to calculated the stock value.

15. E

A mortgage is a long-term loan secured by real estate. It is an amortized loan whereby a fixed payment pays both principal and interest each month. Over 80 percent of mortgage loans finance residential home purchases, instead of less than 65%.

16. E

Freddie Mac issues and guarantees Mortgage Participation Certificates, or "PCs." It is pass-throughs guaranteed by Freddie Mac. They are taxable by federal, state, and local governments. It is not insured or backed by the federal government.

17. C

Denomination intermediation means investors can participate in equity and debt offerings that, individually, require more capital than they possess.

18. A

Treasury STRIPS refers to the coupon and principal payments are “stripped” from a T-Bond and sold as individual zero-coupon bonds.

19. C

Financial derivatives generally involve an agreement between two parties to exchange a standard quantity of an asset at a predetermined price at a specified date in the future. Forward contracts are agreements by two parties to engage in a financial transaction at a future point in time. Therefore, forward contracts are financial derivatives.

20. \$100,000 face value securities for \$96,000

The face value of securities is \$100,000. Since each contract contains 100 shares, there will be $\$100,000/100 = 1,000$ contracts. If you are selling it at the price of 96, that is $1,000 * \$96 = \$96,000$.